COVER SHEET

ENVIRONMENTAL ASSESSMENT

FOR THE PROPOSED CONSTRUCTION OF A HAZARDOUS MATERIALS ISSUE FACILITY AND A HAZARDOUS WASTES STORAGE FACILITY AT BUCKLEY AIR FORCE BASE, COLORADO

Prepared by Headquarters Air Force Center for Environmental Excellence Brooks Air Force Base, Texas 78235-5122

- a. **Responsible Agency**: U.S. Air Force, 460th Air Base Wing
- b. **Proposed Action**: Construct and operate a hazardous materials issue facility and a hazardous wastes storage facility near Building 1005 at Buckley Air Force Base (BAFB), Colorado.
- c. Written comments and inquiries regarding this document should be directed to: Elise Sherva, 460 CES/CEVP, 660 S. Aspen Street (Mail Stop 86), Bldg. 1005, Room 254, Buckley AFB, Colorado 80011-9551; telephone (303) 677-9077; e-mail elise.sherva@buckley.af.mil.
- d. **Privacy Advisory:** Your comments on this Draft Environmental Assessment (EA) are requested. Letters or other written or oral comments provided may be published in the Final EA and made available to the public. Any personal information provided will be used only to identify your desire to make a statement during the public comment portion of any public meeting or hearings or to fulfill requests for copies of the Final EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the name of individuals making comments and specific comments and specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the Final EA.
- e. **Designation**: Environmental Assessment (EA)
- f. Abstract: The purpose for the proposed action is to consolidate and centralize the majority of hazardous materials used and hazardous wastes generated at BAFB to facilitate utilization, tracking, and disposal. The need for the proposed action is to have adequately designed and configured facilities for the proper storage, packaging, and dispensing of hazardous materials and processing of hazardous wastes to further comply with the hazardous and solid waste provisions of the Resource Conservation and Recovery Act (RCRA) and the requirements of the Colorado Department of Public Health and the Environment (CDPHE). The proposed action would be strategically situated and designed to provide a convenient location to manage and control hazardous materials and hazardous wastes, which would improve material control, reduce generated wastes, lessen the chance of spills, and provide a means for instant spill containment. Alternatives considered for this proposed action include (1) the construction of a hazardous materials issue facility and a hazardous wastes storage facility near Building 1005; (2) the construction of a hazardous materials/hazardous wastes pharmacy near Building 1005; or (3) the no action alternative.

This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) to analyze the potential environmental consequences of constructing a hazardous materials issue facility and a hazardous wastes storage facility. Under the no action alternative, hazardous wastes would continued to be stored in two locations on the installation.

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14. ABSTRACT

The purpose for the proposed action is to consolidate and centralize the majority of hazardous materials used and hazardous wastes generated at BAFB to facilitate utilization tracking, and disposal. The need for the proposed action is to have adequately designed and configured facilities for the proper storage, packaging, and dispensing of hazardous materials and processing of hazardous wastes to further comply with the hazardous and solid waste provisions of the Resource Conservation and Recovery Act (RCRA) and the requirements of the Colorado Department of Public Health and the Environment (CDPHE). The proposed action would be strategically situated and designed to provide a convenient location to manage and control hazardous materials and hazardous wastes, which would improve material control, reduce generated wastes, lessen the chance of spills, and provide a means for instant spill containment. Alternatives considered for this proposed action include (1) the construction of a hazardous materials issue facility and a hazardous wastes storage facility near Building 1005; (2) the construction of a hazardous materials/hazardous wastes pharmacy near Building 1005; or (3) the no action alternative. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) to analyze the potential environmental consequences of constructing a hazardous materials issue facility and a hazardous wastes storage facility. Under the no action alternative, hazardous wastes would continued to be stored in two locations on the installation. The environmental resources potentially affected by the proposed action and alternatives include hydrologic resources; air quality; noise; biological resources, including vegetation, wildlife, and protected species; social and economic resources, including environmental justice; land use and transportation; public services and utilities; and hazardous materials and substances. Based on the nature of the activities that would occur during construction/operation of the hazardous materials issue facility and a hazardous wastes storage facility, the U.S. Air Force has determined that minimal or no adverse impacts to the above resources are anticipated.

15. SUBJECT TERMS					
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a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	163	RESI GINSISEE I ERGGI.

Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std Z39-18 The environmental resources potentially affected by the proposed action and alternatives include hydrologic resources; air quality; noise; biological resources, including vegetation, wildlife, and protected species; social and economic resources, including environmental justice; land use and transportation; public services and utilities; and hazardous materials and substances. Based on the nature of the activities that would occur during construction/operation of the hazardous materials issue facility and a hazardous wastes storage facility, the U.S. Air Force has determined that minimal or no adverse impacts to the above resources are anticipated.

Comments must be received by: 28 April 2004

g.

FINDING OF NO SIGNIFICANT IMPACT CONSTRUCTION/OPERATION OF HAZARDOUS MATERIALS ISSUE FACILITY AND A HAZARDOUS WASTES STORAGE FACILITY AT BUCKLEY AIR FORCE BASE, COLORADO

Agency

U.S. Air Force, 460th Space Wing

Background

The attached environmental assessment (EA), dated August 2004, analyzes the potential for impacts to the environment as a result of construction/operation of a hazardous materials issue facility and a hazardous wastes storage facility at Buckley Air Force Base (BAFB), Colorado. This EA was prepared in accordance to 32 Code of Federal Regulations (CFR) §989, which, in turn, implements Section 102 (2) of the National Environmental Policy Act (NEPA) and the regulations established by the Council on Environmental Quality (CEQ).

Proposed Action

The proposed action and alternatives included (1) construction/operation of a hazardous materials issue facility and a hazardous wastes storage facility near Building 1005 (Proposed Action); (2) construction/operation of a hazardous materials/hazardous wastes pharmacy near Building 1005 (Alternative 1); and (3) the no action alternative.

Factors Considered in Determining That No Environmental Impact Statement is Required

The EA analyzed the environmental impacts of implementing the Proposed Action, Alternative 1, and the No Action Alternative taking into account all relevant environmental resource areas and conditions. The U.S. Air Force (USAF) has examined the following resource areas and found that implementing the Proposed Action or Alternative 1 would not result in any significant impacts: surface water resources and stormwater quality; air quality; noise; biological resources; social or economic resources; land use and transportation; public utilities; and hazardous materials and substances.

Public Notice

NEPA, 40 CFR §1500-1508, and 32 CFR §989 require public review of the EA before approval of the Finding of No Significant Impact (FONSI) and implementation of the Proposed Action. The public review period ended on 28 April 2004.

Errata in EA

The census tract information in the EA was not interpreted fully according to "Air Force Guide for Environmental Justice [EJ] Analysis with the Environmental Impact Analysis Process [EIAP]" (November 1997). If the guidance had been applied fully to define poverty at the census tract, it would have identified the tract as a low-income population. However, the guidance states that EJ analysis is necessary "only if the environmental impact analysis indicates that there may be impacts." Therefore, "if there would be no adverse impact, then there would not be any disproportionately high and adverse impact to minority or low-income populations." The EJ analysis in the EA correctly states that "there would be no anticipated impacts" (i.e., adverse impacts). Therefore, regardless of the discrepancy in defining the surrounding population, there would not be any disproportionately high and adverse impact to minority or low-income populations. My decision is based on the practical result that the construction of the facility will not adversely impact the surrounding population.

Finding of No Significant Impact

Based on the requirements of NEPA, 40 CFR §1500-1508, and 32 CFR §989, I conclude that the environmental effects of implementing the Proposed Action are not significant, and therefore, an environmental impact statement will not be prepared. A notice of availability for public review was published in the Denver Post on 28 March 2004 indicating a 30-day review period. A hard copy of the Draft EA and Draft FONSI was placed in the Denver and Aurora public libraries for dissemination. The signing of this FONSI completes the USAF EIAP.

ALLEN KIRKMAN, JR., Colonel, USAF

EPC Chairperson

4 APML 2005

Date

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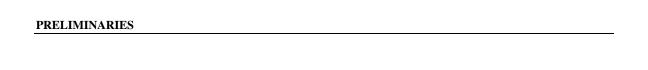
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SECTION 1.0 PURPOSE OF AND NEED FOR THE ACTION

This environmental assessment (EA) was prepared in accordance with 32 Code of Federal Regulations (CFR) §989, which, in turn, implements Section 102 (2) of the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321 to 4370d), as implemented by the regulations promulgated by the Council on Environmental Quality (CEQ) (40 CFR §1500-1508). The principal objectives of NEPA are to ensure the careful consideration of environmental aspects of proposed actions in federal decision-making processes and to make environmental information available to decision-makers and the public, before decisions are made and actions are taken. This EA has been prepared by the U.S. Air Force (USAF) to assess the environmental effects resulting from the proposed construction of a hazardous materials issue facility and a hazardous wastes storage facility at Buckley Air Force Base (BAFB).

1.1 INTRODUCTION AND BACKGROUND

BAFB lies within the Denver metropolitan area and encompasses approximately 3,283 acres adjacent to the City of Aurora, Arapahoe County, Colorado (Figure 1-1). The 460th Air Base Wing (460 ABW) is the current host of BAFB. The mission of the 460th Air Base Wing is to provide combat capability through superior services to air and space, DoD missions and expeditionary forces. The current population of BAFB includes 3,600 active duty personnel, approximately 3,600 civilian employees, approximately 1,750 contract employees, approximately 22,000 retirees, and approximately 55,000 dependents and veterans. The tenant units at BAFB are listed in Table 1-1; however, this list is not inclusive since units tend to change periodically.

During the initial scoping process, five military construction actions planned for FY 03 were to be considered within one EA. These actions included the 140th Wing COANG Headquarters, a car wash, a hazardous materials/hazardous wastes pharmacy, an H-70 fuel storage facility, and a medical pharmacy. However, due to changes in construction scheduling and scope of individual actions, this EA only addresses the military construction of a hazardous material issue facility and a hazardous wastes storage facility. The 140th Wing COANG Headquarters proposed action has been rescheduled for fiscal year 2006 (FY 06), the car wash was developed into an additional EA, and the H-70 fuel storage facility and a medical pharmacy were developed into a combined additional EA.

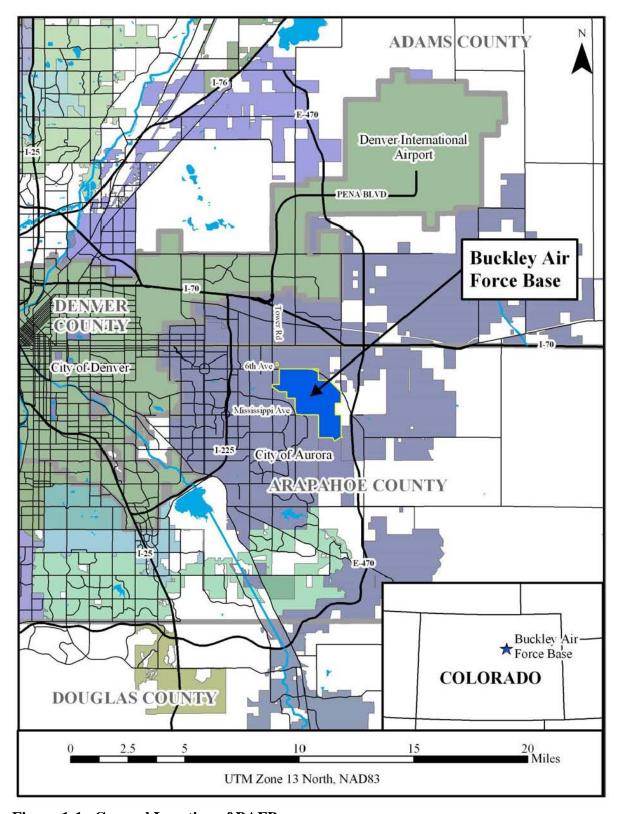


Figure 1-1. General Location of BAFB

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Table 1-1 **Tenant Units on BAFB**

- 1st Battalion, 89th Troop Command (Army)
- 2nd Space Warning Squadron
- 8th Space Warning Squadron
- 120th Fighter Squadron
- 140th Wing, COANG
- 240th Civil Engineering Flight
- 169th Field Artillery Brigade, COARNG

- 743rd Military Intelligence Battalion
- Aerospace Data Facility
- Air Force Accounting and Finance Office
- Air Reserve Personnel Center
- Army/Air Force Exchange Service
- Battery A, 1st Battalion, 14th Marines
- Company A, Marine Support Battalion
- COARNG

- Civil Air Patrol Combined Task
- Defense Commissary Agency
- Defense Contract Manager
- Department of Military Affairs
- Detachment 4, Air Force Operational Testing and **Evaluations Center**
- Detachment 801, Air Force Office of Special Investigations

- Detachment 45, Air Force Technical **Applications Center**
- Navy and Marine Corps Reserve Centers, Naval Air Reserve Center. Denver
- U.S. Property and Fiscal Office for Colorado
- U.S. Army Corps of Engineers
- U.S. Military **Entrance Processing** Command

COANG = Colorado Air National Guard COARNG = Colorado Army National Guard

Source: 460th Air Base Wing Directory 15 January 2003

1.2 PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS AT BUCKLEY AIR FORCE BASE

Approximately 50 activities/facilities have been identified as needed for successful operation of BAFB and to improve the quality of life for active, reserve, and retired members of the armed services living in the Denver area. The BAFB General Plan lists more than 2.8 million square feet (SF) of facilities/areas proposed for construction between Fiscal Year 2002 (FY 02) to FY 13 (BAFB 2002b). Since FY 02, construction has been completed on a new base exchange/commissary, a space-based infrared surveillance (SBIRS) antenna, a fitness center, and the Telluride Gate, and Building 25 has been demolished for a net increase of approximately 217,000 SF. Over the next four year (FY 04-FY 08) approximately 1.6 million SF of new facilities construction is planned and approximately 85,000 SF is scheduled to be demolished; however, time lines are subject to change and projects may be constructed at earlier or later dates. The hazardous materials issue facility and the hazardous wastes storage facility would account for approximately 10,226 SF of this total. Other planned construction activities on BAFB are listed in Table 1-2. Currently, BAFB has 176 buildings with approximately 2.5 million gross SF of occupiable floor space and approximately 2.0 million SF of parking (BAFB 2002b).

1.3 PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose for the proposed action is to consolidate and centralize the majority of hazardous materials used and hazardous wastes generated at BAFB to facilitate

Table 1-2 Scheduled Facility Projects at BAFB

FY 02

- Physical Fitness Center (completed)
- 2nd Dormitory (144) (under construction)
- Military Family Housing¹
- Telluride/6th Avenue Entry Gate (completed)

FY 03

- 460 ABW Headquarters
- ADAL SBIRS Mission Control (under construction)
- Visitors' Quarters
- Temporary Lodging Facility (NAF)
- Car Wash (AAFES)
- Control Tower (COANG)
- Fire Station Addition
- Engine Shop Addition, Building 960 (COANG)
- Repair Runway, Taxiways, Ramps (COANG)
- Williams Lake Pavilions (2)
- Entomology
- H-70 Fuel Storage Facility
- Golf Driving Range (NAF)
- Addition to Child Development Center
- Civil Engineering Warehouse

FY 04

- Upgrade BAFB Infrastructure, Phase III
- Air National Guard Civil Engineering Complex
- Approach Lighting (COANG)
- Repair COANG Parking Lots (COANG)
- Repair Parking Lot East of Building 471
- ADAL Airfield Access Roads (COANG)
- Fire Training Facility
- Impound Lot
- East Gate
- Visitor Center

FY 05

- Vail Street Improvements
- Repair Taxiways A & K
- Chapel Center
- Child Development Center
- Playgrounds

FY 05 (cont'd)

- Athletic Fields
- Outdoor Recreation Equipment Rental Facility (NAF)
- ADAL Medical Clinic
- Hazardous Waste Storage Facility
- Hazardous Materials Issue Facility
- Army Aviation Support Facility (COARNG)
- Permanent Alert Shelters & Crew Quarters (COANG)

FY 06

- Medical Pharmacy
- Leadership Development Center
- Consolidated Fuels, including Military Gas Station
- Logistics Complex
- Consolidated Services Facility
- Security Forces Operations Facility
- Youth Center (NAF)
- Ball Field Concession (NAF)
- Outdoor Arms Range

FY 07

- Education Center
- ADAL Communications Center, Building 730
- Vehicle Maintenance Facility

FY 08

- Widen 6th Avenue
- Consolidated Base Warehouse
- Entry Control Facility
- Aerospace Data Facility Addition

FY 09

- Upgrade Infrastructure Phase IV
- Fitness Center Addition
- Fire Station Addition
- New Parking Apron
- Taxiway and Arm/Disarm (COANG)
- Weapons Loading Facility (COANG)
- Weapons Release Complex (COANG)

These projects were carried into FY 03.

AAFES = Army/Air Force Exchange Service

ADAL = Addition/Alteration

COANG= Colorado Air National Guard

COARNG = Colorado Army National Guard

NAF = nonappropriated funds

Source: 1st Quarter BAFB Facilities Board, 31 January 2004

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A Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility August 2004

utilization, tracking, and disposal. The need for the proposed action is to have adequately designed and configured facilities for the proper storage, packaging, and dispensing of hazardous materials and processing of hazardous wastes to further comply with the hazardous and solid waste provisions of the Resource Conservation and Recovery Act (RCRA) and the requirements of the Colorado Department of Public Health and the Environment (CDPHE). The proposed action would be strategically located in a compatible land use area (i.e., industrial) near the Mississippi Gate entrance, where all truck traffic is required to enter and designed to provide a single source to manage and control hazardous materials and hazardous wastes, which would improve material control, reduce generated wastes, lessen the chance of spills, and provide a means for instant spill containment. Currently, hazardous materials and hazardous wastes are stored in four portable metal containers equipped with secondary containment at two locations on the installation, the North Yard for universal wastes and a central accumulation site (CAS) for hazardous wastes and materials. These multiple containers for hazardous wastes, as well as the location of the North Yard at the busy intersection of Steamboat Avenue and Aspen Street, could increase the probability of a spill occurring during the transport of universal or hazardous wastes due to increased handling and transit times.

1.4 SCOPE OF THE ENVIRONMENTAL ASSESSMENT

As mentioned previously, five military construction actions planned for FY 03 were to be considered within one EA. Due to changes in construction scheduling and scope of individual actions, this EA only addresses the military construction of a hazardous material issue facility and a hazardous wastes storage facility.

This analysis addresses the potential impacts to hydrologic resources; air quality; noise; biological resources, including vegetation, wildlife, and protected species; social and economic resources, including environmental justice; land use and transportation; public utilities; hazardous materials and substances, including asbestos. The regulatory requirements for each of the resource areas are also identified, as well as the existing conditions of each resource area on the installation.

The NEPA and CEQ regulations require that the environmental effects of proposed actions and alternatives be considered in the decision-making process. Preparation of an environmental document (this EA) must precede final decisions regarding the proposed action, and be available to inform decision-makers and the public of potential environmental consequences/impacts. The development of this EA allows for public consideration and input concerning the implementation of the proposed military construction of a hazardous materials issue facility and a hazardous wastes storage This EA provides the decision-makers and the public with the facility at BAFB. information required to understand the possible future environmental consequences/impacts of the implementation of the proposed action or alternatives. The decision to be made, after a review of the analysis presented in this EA, would be whether to issue a finding of no significant impact (FONSI) or to proceed with the

implementation of an environmental impact statement (EIS) to further quantify and detail the potentially significant impacts resulting from implementation of the proposed action or alternatives. While this EA provides information with which to make better decisions about proposed actions, it does not imply project approval or authorization, which is obtained through the 460th ABW Facilities Board.

1.5 ORGANIZATION OF THE ENVIRONMENTAL ASSESSMENT

This document follows the format established in 32 CFR §989 implementing the CEQ regulations (40 CFR §1502). The document consists of the following sections:

Section 1.0 – Purpose of and Need for the Action: presents a brief description of the background of the installation; the past, present, and reasonably foreseeable future actions on BAFB; the purpose and need for the proposed action; the scope of the environmental review; and a brief description of the EA organization.

Section 2.0 – Alternatives Including the Proposed Action: provides a detailed description of the selection criteria and descriptions of the proposed action and alternatives. Section 2.0 also contains an alternatives comparison matrix.

Section 3.0 – Affected Environment: presents the existing baseline environment or present condition of the area(s) potentially affected by the alternatives identified to implement the proposed action. Each environmental resource potentially impacted by the implementation of the proposed action and alternatives is discussed, as well as the regulatory background, if applicable, for each impacted resource area.

Section 4.0 – Environmental Consequences: provides the scientific and/or analytical basis for comparing the alternatives and describes the probable consequences of each alternative on relevant environmental attributes.

Section 5.0 – List of Preparers: provides a list of the document preparers and contributors.

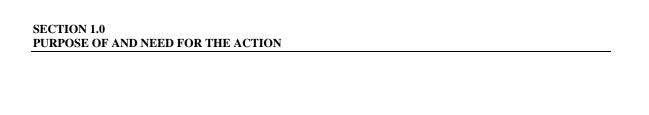
Section 6.0 – Distribution List and Agencies and Individuals Contacted: provides a list of persons/agencies contacted in the preparation of this EA.

Section 7.0 – References: provides a list of references used in the preparation of this EA.

Section 8.0 – Acronyms and Abbreviations: provides a list of applicable acronyms and abbreviations used throughout the text.

Appendices: provide background and supporting information to this EA, as necessary. Appendices included in this EA are Appendix A: USAF Form 813;

Appendix B: Notice of Availability and Affidavit of Publication; Appendix C: Interagency Coordination Letters; and Appendix D: Comments and Response to Comments.



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SECTION 2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

This section of the EA describes the proposed action and the alternatives developed by BAFB. This section also describes the process used to objectively identify the reasonable alternatives carried forward for detailed environmental analysis, as well as the reasoning for elimination of alternatives. A comparative summary of the proposed action, alternatives, and how they do or do not meet the selection criteria identified in Section 2.1 is also included.

2.1 IDENTIFICATION OF SELECTION CRITERIA

In an effort to satisfy the purpose and need for the proposed action, several selection criteria were developed to compare and contrast alternative ways of fulfilling the objectives of the proposed action in accordance with 32 CFR §989.8(c). Those specific criteria include:

- 1. Locate with access to utilities, such as electricity, water, and sewer. BAFB would like to locate the facility in an area that has current connections to local utilities. By locating in an area such as this, BAFB is eliminating the costs associated with extensive utility installation in previously undeveloped areas.
- 2. **Locate within a compatible land use zone**. Given the mission of the 460th ABW and the flight operations of the 140th Wing of the Colorado Air National Guard (COANG), special consideration must be given to placement of the facility in a compatible land use area. Areas that would not be considered compatible would be residential, residential related (i.e., schools, churches, hospitals), and runway clear zones.
- 3. **Locate in a disturbed area**. BAFB would like to limit the amount of development occurring on undeveloped portions of the installation. Additionally, cost savings could be generated through the reuse of previously disturbed portions of the installation.
- 4. Locate in a centralized and easily accessible location. Given the nature of the facility, it should be located in a centralized and easily accessible location. A centralized location would limit the distance and amount of time hazardous materials/hazardous wastes are in transit. The location must be easily accessible to a semi and trailer for off-site hazardous waste disposal. The site should also be within walking distance from the civil engineering (CE) operations, Building 1005, to ensure greater convenience for the hazardous materials and hazardous wastes managers.

2.2 DESCRIPTION OF THE PROPOSED ACTION

The proposed action would include the construction of an approximately 3,767 SF single-story, steel frame structure adjacent to the CE Operations Center (Building 1005) for the hazardous materials issue facility and the construction of an approximately 1,615 SF structure of similar composition for the hazardous waste storage facility nearby, plus an additional 4,844 SF of surface parking (Figure 2-1). Special provisions at these facilities would include spill containment and recovery systems, emergency eyewash and shower stations, fire protection, pre-wiring for communications, and low-level antiterrorism/force protection measures. The hazardous materials issue facility would also contain a customer service area, a management/administration area, and a staging, separation, and reutilization area. The hazardous wastes storage facility would serve only as a storage area, it would not contain administrative areas. All activities currently taking place at existing hazardous materials/hazardous wastes storage locations would be relocated to these facilities. The current facilities would be converted to other uses or excessed. The proposed action would meet the selection criteria detailed previously. More specifically, this action:

- 1. Would be located at a site that currently has utilities, such as electricity, water, and sewer.
- 2. Would be located at a site that is within a compatible land use zone.
- 3. Would be located at a site that has been previously or currently is disturbed.
- 4. Would be located at a site that is centralized and easily accessible.

2.2.1 Construction Activities

The footprint of these facilities would provide an interior capacity of approximately 5,382 SF, and all construction activities would occur entirely within a 1.0-acre site on BAFB. As mentioned previously, the facilities would be a single-story, steel frame structures. Adjacent to these facilities, a parking area, of approximately 4,844 SF, would also be constructed. Access to these facilities would be through the parking area of Building 1005. All supporting facilities would be constructed within the 1.0-acre boundary limit.

Construction would not begin until FY 05 and is anticipated to last approximately seven months; however, the timeline is subject to change and the projects may be constructed at an earlier or later date or in different years. On-site construction equipment would include the use of heavy trucks or the equivalent. Additional light-duty equipment (e.g., generators, compressors, etc.) would also be utilized throughout the duration of activities. All equipment would likely come from local sources and would be brought to the site via

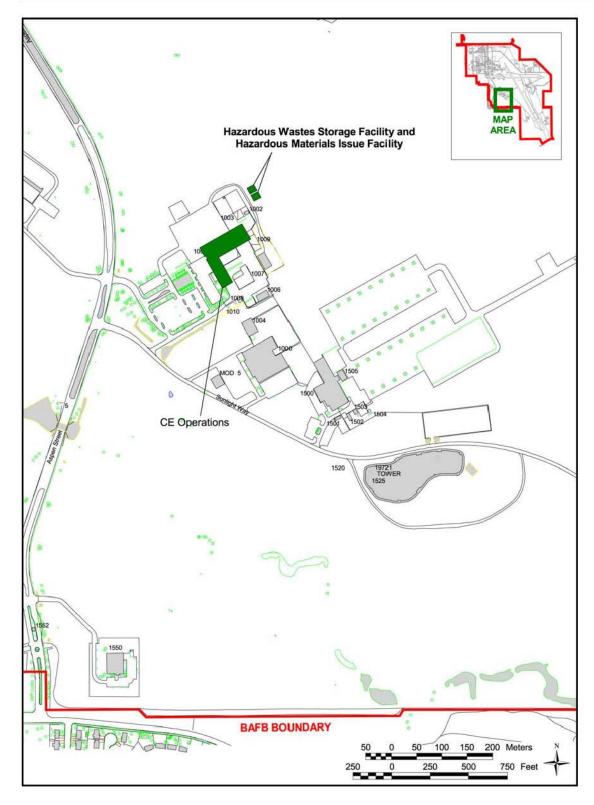


Figure 2-1. Location of the Proposed Hazardous Materials Issue Facility and the Hazardous Wastes Storage Facility (Proposed Action)

local roadways. Equipment maintenance would be conducted off site by the contractor and in accordance with all applicable laws and regulations. Construction activities would typically occur eight hours per day, five days per week. A majority of the construction materials would likely come from local sources and would be stored at the project area for the duration of activities. No grading plan is currently available; however, preliminary plans indicate that cut-and-fill materials would be balanced so that no new soils would be brought on site or existing soils removed. All construction debris would be disposed of at an approved local off-base landfill in accordance with all applicable federal, state, and local laws and regulations. To reduce impacts to local and regional air quality, best management practices (BMPs), such as proper maintenance of construction vehicles to reduce combustive emissions, limiting the size of the disturbance area, and watering exposed soils at the beginning and end of daily construction activities, as necessary, would be implemented to minimize or prevent fugitive dust emissions.

In accordance with the National Pollutant Discharge Elimination System (NPDES) Phase II requirements (construction sites between 1 to 5 acres), a NPDES General Permit for Stormwater Discharges from Construction Activities would be obtained and a site-specific stormwater pollution prevention plan (SWPPP), meeting the conditions of the BAFB basewide SWPPP would be implemented for construction of the these facilities. A notice of intent (NOI) would be filed with the U.S. Environmental Protection Agency (USEPA) in sufficient time to ensure issuance of the General Permit prior to construction activities. The SWPPP would be maintained on site and would provide measures to eliminate or reduce any potential impacts to surface water quality in the project area (i.e., implementation of BMPs).

Additionally, in accordance with the Supplemental EA of the Proposed Prairie Dog Management Practices at BAFB, dated June 2001, black-tailed prairie dog and burrowing owl surveys would be conducted prior to commencement of any construction activities to verify the presence/absence of either black-tailed prairie dogs or burrowing owls. In areas with known burrowing owl nests, construction activities would be conducted between November and February to avoid any nesting owls. Prairie dogs would be removed prior to commencing construction activities using approved removal methods. If prairie dogs and/or burrowing owls are identified during construction activities, construction activities would be halted and the 460 Civil Engineering Squadron (CES)/Environmental Flight (CEVP), Natural Resources Manager would be contacted for further instructions.

2.2.2 Operations

The mission of the hazardous materials issue facility and the hazardous wastes storage facility is to provide a single point of control and management, accountability and tracking of the distribution and use of all hazardous materials brought on base. The hazardous materials issue facility would be used to store hazardous materials in bulk for repacking, breakout, and distribution. This activity would have the capability of

compatible segregated storage for hazardous materials in accordance with the Occupational Health and Safety Administration (OSHA) storage standards. This facility would make the hazardous materials available in the smallest units deemed reasonable. Hazardous materials would be repacked into smaller, more usable quantities for distribution or issued as a single item. This facility would also have an area designated for inspection of returned material to determine if it can be reused, recycled, or ultimately be declared waste.

These facilities would be used to house the majority of hazardous materials, as well as serve as a CAS for hazardous wastes storage in accordance with RCRA small quantity generator (SOG) guidelines (storage no more than 180 days) prior to its shipment to an off-site storage, treatment, or disposal facility. The hazardous materials/hazardous wastes manager and staff would supply hazardous materials to approved BAFB personnel on an as-needed basis, from the issue facility. Office spaces in the issue facility would be limited and the staff would be mainly located at Building 1005. All hazardous materials use and hazard wastes generation would continue to be tracked via database systems to reduce the amount of redundant hazardous materials stored onsite at BAFB. hazardous materials issue facility would facilitate the proper storage, packaging, and dispensing of hazardous materials, while the hazardous wastes storage facility would facilitate proper processing of hazardous wastes to further comply with the hazardous and solid waste provisions of the RCRA. The facility would be strategically located and designed to provide a convenient location from which to manage and control hazardous materials and hazardous wastes, which would improve material control, reduce generated wastes, lessen the chance of spills, and provide a means for instant spill containment.

2.3 ALTERNATIVES EVALUATION PROCESS

The purpose and need for the proposed action has been examined and documented in Section 1.2. The following analysis of alternatives was prepared to determine which, if any, alternative(s) to the proposed action satisfies that purpose and need statement. Alternatives that did not fully satisfy the purpose and need were not carried forward for detailed analysis in this EA. The alternatives analyzed include:

- No Action
- Construction of a Hazardous Materials/Hazardous Wastes Pharmacy Near Building 1005 (Alternative 1)
- Construction of a Hazardous Materials/Hazardous Wastes Pharmacy at the North Yard

The alternatives evaluation utilized a two-tiered evaluation process formulated to concentrate on the purpose and need for the proposed action – to centralize all hazardous materials/hazardous wastes used or generated at BAFB to facilitate utilization, tracking, and disposal – in an effort to efficiently execute the military mission at BAFB. As the

alternative evaluation proceeded through each tier, the alternatives that did not satisfy all of the criteria were eliminated from further consideration. Those alternatives that did fully satisfy the criteria continued to be subject to the next set of tier criteria. The following briefly describes the specific evaluation criteria used at each of the two tiers.

- Tier 1 evaluated whether or not the various alternatives would fully meet the purpose and need selection criteria.
- Tier 2 evaluated whether or not the various alternatives would result in adverse environmental impacts.

The second tier of the alternatives evaluation process looked at one additional action alternative because the other action alternative did not fully satisfy all of the Tier 1 criteria (i.e., the purpose and need for the action). The alternative eliminated from detailed study is briefly discussed in the following section.

2.3.1 Alternatives Eliminated from Detailed Analysis (Construction of a Hazardous Materials/Hazardous Wastes Pharmacy at the North Yard)

Under this alternative, an approximately 5,447-SF facility would be constructed in the North Yard. This alternative was not considered viable due to the lack of existing utilities at the North Yard. Additionally, this location would not be within a centralized and easily accessible location from Building 1005 and office of the hazardous waste manager. This alternative would also require trucks to enter at the Mississippi Gate and travel the entire length of the installation, including traveling through the busy intersection at Steamboat Avenue and Aspen Street, to reach the North Yard.

2.3.2 Alternatives Carried Forward for Detailed Analysis

2.3.2.1 No Action Alternative

The no action alternative does not satisfy the Tier 1 criteria; however, pursuant to NEPA, the no action alternative has been carried forward as the baseline to which potential impacts of the action alternative can be measured. Under the no action alternative, hazardous materials and hazardous wastes would continue to be stored in decentralized metal containers. This action is inconvenient and increases the probability of traffic congestion and the probability of spills due to increased transit of hazardous wastes on the installation.

2.3.2.2 Alternative **1**

Under this alternative an approximately 5,447 SF single-story, steel frame structure with reinforced concrete foundation and slab, split face concrete masonry unit (CMU) exterior, and standing seam metal roof, plus an additional 4,902 SF of surface parking adjacent to

Building 1005 would be constructed to house the majority of the hazardous materials used and hazardous wastes generated at BAFB (see Figure 2-1). Special provisions at this facility would include spill containment and recovery systems, emergency eyewash and shower stations, fire protection, pre-wiring for communications, and low-level antiterrorism/force protection measures. All activities currently taking place at existing hazardous materials/hazardous wastes storage locations would be relocated to this facility. The current facilities would be converted to other uses or excessed. This alternative would meet the selection criteria detailed previously. More specifically, this action:

- 1. Would be located at a site that currently has utilities, such as electricity, water, and sewer.
- 2. Would be located at a site that is within a compatible land use zone.
- 3. Would be located at a site that has been previously or currently is disturbed.
- 4. Would be located at a site that is centralized and easily accessible.

Under this alternative construction activities would be similar to the proposed action, except all activities would be contained within one facility. The footprint of the facility would provide an interior capacity of approximately 5,447 SF and exterior surface parking of 4,902 SF, all of which would be constructed entirely within a 1.0-acre site on BAFB. Additionally, operation of the combined hazardous materials/hazardous wastes pharmacy would be similar to the proposed action.

2.4 COMPARISON OF THE ALTERNATIVES

Table 2-1 provides a summary comparison of the alternatives as they related to the purpose and need criteria presented in Section 2.1.

Table 2-1 Summary Comparison of Proposed Action and Alternatives

Purpose and Need Criteria	Proposed Action	No Action	Alternative 1
Locate with access to utilities, such as electricity, water, and sewer	YES	NO	YES
Locate within a compatible land use zone	YES	NO	YES
Locate in an area previously or currently disturbed	YES	YES	YES
Locate in a centralized and easily accessible location	YES	NO	YES

SECTION 3.0 AFFECTED ENVIRONMENT

This section of the EA provides a description of the existing environment of the project area (one-acre construction and staging area adjacent to Building 1005) that comprises the proposed action and alternatives under consideration (see Section 2.3). In addition, this section also addresses those resource area that have been excluded from detailed analysis due to either levels and significance of previous impacts, geographic scale of the resources, or the absence of those resources from the project area and adjacent areas.

3.1 SURFACE WATER RESOURCES AND STORMWATER QUALITY

3.1.1 Regulatory Requirements

Surface water resources, as with any hydrologic unit, are vulnerable to contamination and quality degradation. For this reason, the Federal Water Pollution Control Act (FWPCA), as amended by the Clean Water Act (CWA) of 1977, was enacted to protect these resources. The Water Pollution Prevention and Control Act (33 USC 26), also known as the CWA Amendments, set the national policy objective to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The FWPCA provides the authority to establish water quality standards, control discharges into surface and subsurface waters (including groundwater), develop waste treatment management plans and practices, and issue permits for discharges (Section 402) and for dredged or fill material (Section 404). A NPDES permit under Section 402 of the CWA is required for discharges into navigable waters; a Section 404 permit is required for dredged or fill material in navigable waters; and a Section 10 permit under the Rivers and Harbors Act of 1899 is required for obstruction or alteration of navigable waters. Navigable waters have been very broadly defined in USEPA regulations (40 CFR §230) and encompass most bodies of water (including wetlands) and their tributaries. The USEPA is charged with the overall responsibility for Section 402 permits; the U.S. Army Corps of Engineers (USACE) has responsibility for Section 404 permits; and the U.S. Coast Guard has responsibility for Section 10 permits.

3.1.2 Existing Conditions

The region of influence (ROI) for surface water and stormwater issues is confined to the area of the installation west and south of the airfield.

3.1.2.1 Surface Water

The South Platte River, located approximately 15 miles northwest of BAFB, is the primary surface water drainage in the region. Several smaller intermittent tributaries located within or adjacent to BAFB feed this drainage system. East Toll Gate Creek and

an old tributary of Murphy Creek are the only named tributaries that are present on the installation. These waterways are intermittent in the vicinity of, and on, BAFB (BANGB 1999). There are no surface water features within or adjacent to the project area. The nearest surface water feature is an unnamed tributary to East Toll Gate Creek approximately 800 feet north (Figure 3-1).

3.1.2.2 Stormwater Quality

BAFB is located at the headwaters of several streams that are tributaries to the South Platte River. Any materials that enter the waterways could affect the quality of the waters leaving the installation. Potential water contaminants that could be carried in stormwater flows, could include fertilizers, pesticides, and pet wastes from lawns; fuel, oil, grease, and coolant that drop onto the pavement from vehicles and aircraft; and deicing chemicals applied to roadways, runways, and aircraft. Other potential contaminant sources include environmental restoration program (ERP) sites, chemical and fuel storage facilities, and golf courses.

BAFB currently protects its watershed through compliance with a number of federal, state, local, and USAF environmental regulations that require the installation to have detailed spill control and response procedures and to implement stormwater pollution prevention BMPs. Specific watershed protection measures used by the base include spill cleanup equipment at industrial locations, integrated pest management, and reduction of fertilizer applications. Wastewater generated at the installation is discharged to the sanitary sewer.

3.2 AIR QUALITY

3.2.1 Regulatory Requirements

The Clean Air Act (CAA) (42 USC 7401-7671q), as amended, provides the framework for federal, state, tribal, and local rules and regulations to protect air quality. The CAA gives the USEPA the responsibility to establish the primary and secondary National Ambient Air Quality Standards (NAAQS) (40 CFR §50) that set safe concentration levels for six criteria pollutants: particulate matter measuring less than 10 microns in diameter (PM₁₀), sulfur dioxide (SO₂), carbon monoxide (CO), nitrous oxides (NO_x), ozone (O₃), and lead (Pb). Primary NAAQS are established to protect public health, and secondary standards provide protection for the public welfare, which includes wildlife, climate, transportation, and economic values (Table 3-1). Additionally, the USEPA also has responsibility for ensuring that air quality standards are met to control pollutant emissions from mobile (i.e., vehicles) and stationary (i.e., factories) sources.

The NAAQS represent the maximum levels of background pollutants that are considered safe, with an adequate margin of safety to protect public health and welfare. Short-term

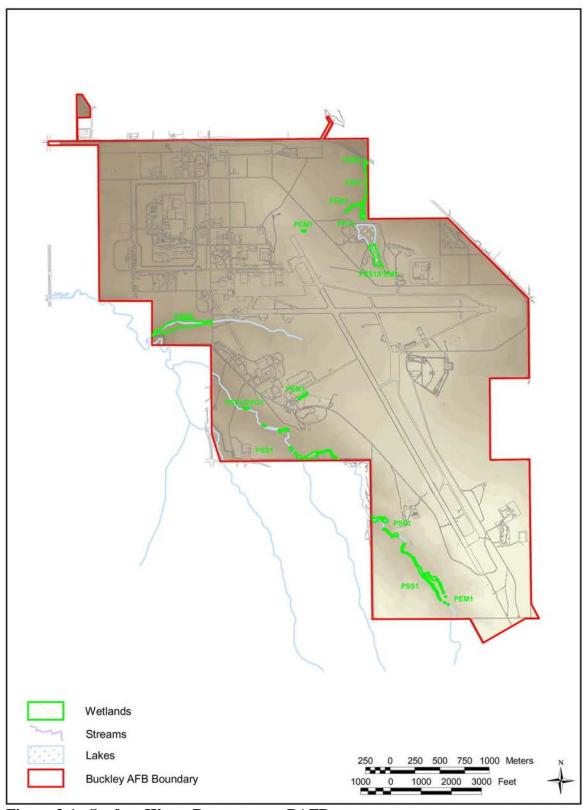


Figure 3-1. Surface Water Resources on BAFB

Table 3-1
National Ambient Air Quality Standards

Air	Air NAAQS		
Pollutant	Averaging Time	Primary ¹	Secondary ²
СО	1-hour 8-hour	35 ppm 9 ppm	35 ppm 9 ppm
NO_2	Annual	0.053 ppm	0.053 ppm
SO_2	3-hour 24-hour Annual	0.14 ppm 0.03 ppm	0.50 ppm - -
PM_{10}	24-hour Annual	150 μg/m³ 50 μg/m³	150 μg/m³ 50 μg/m³
O_3	1-hour ³ 8-hour	0.12 ppm 0.08 ppm	0.12 ppm 0.08 ppm
Pb	Quarterly average	$1.5 \mu g/m^3$	$1.5 \mu g/m^3$

¹ Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.

ppm = parts per million

 $\mu g/m^3 = micrograms per cubic meter$

Source: USEPA 2002

standards (1-, 8-, and 24-hour periods) have been established for pollutants contributing to acute health effects, while long-term standards (annual averages) have been established for pollutants contributing to chronic health effects. Each state has the authority to adopt standards stricter than those established under the federal program; however, the CDPHE Air Pollution Control Division (APCD) accepts the federal standards for the Denver metropolitan area.

Areas that violate NAAQS are designated as "nonattainment" areas, and areas that comply with air quality standards are designated "attainment" areas for the relevant pollutants. "Attainment/maintenance" areas are areas that have previously been designated "nonattainment," and have subsequently been redesignated to due to demonstrating monitored compliance with the NAAQS. Attainment/maintenance status is achieved through the development and implementation of maintenance plans for criteria pollutants of interest.

The Clean Air Act contains the legislation that mandates the general conformity rule to ensure that federal actions in nonattainment and attainment/maintenance areas do not interfere with a state's timely attainment of the NAAQS. The CAA also requires that federal agencies demonstrate that their actions conducted in nonattainment and attainment/maintenance areas conform to the purposes of the State Implementation Plan (SIP).

² Secondary standards set limits to protect public welfare, including protection against decreased visibility, and damage to animals, crops, vegetation, and buildings.

The ozone 1-hour standard applies only to designated nonattainment areas.

The general conformity rule divides the air conformity process into two distinct areas: applicability analysis and conformity determination. The applicability analysis process requires federal agencies to determine if their proposed action(s) would increase emissions of criteria pollutants above the threshold levels (40 CFR §93.153). Table 3-2 lists the threshold rates for attainment areas. *De minimis* emissions are total direct and indirect emissions of a criteria pollutant that are caused by a federal action in a nonattainment or attainment/maintenance area that are less than these threshold rates. Regionally significant emissions are defined as the total direct and indirect emissions of a federal action for any criteria pollutant that represents 10 percent or more of a nonattainment or maintenance area's emission inventory for that pollutant.

Table 3-2
Applicability Thresholds for Attainment/Maintenance Areas

Criteria Pollutants TPY		
O_3 (NO _x , SO ₂ or NO ₂)		
All maintenance areas	100	
O ₃ (VOCs)		
Maintenance areas inside an O ₃ transport region	50	
Maintenance areas outside an O ₃ transport region 100		
СО		
All maintenance areas	100	
PM_{10}		
All maintenance areas 100		
Pb		
All maintenance areas 25		

TPY = tons per year

VOC = volatile organic compounds

Source: 40 CFR §93.153

3.2.2 Existing Conditions

BAFB is located in Arapahoe County, Colorado, within the Metropolitan Denver Air Quality Control Region (AQCR 36) (Figure 3-2). The Denver metropolitan area was designated by the USEPA as serious nonattainment for CO, nonattainment for the 1-hour O₃ standard, and moderate nonattainment for PM₁₀; however, the region has received redesignations of attainment/maintenance status effective 14 January 2002 for CO, 11 October 2001 for O₃, and 16 October 2002 for PM₁₀ (APCD 2002). The ROI for this resource area is the installation, which is compared to Arapahoe County and the Metropolitan Denver AQCR.

BAFB has been identified as a major source of criteria pollutants because it has the potential to emit or has actual emissions of more than 100 tons of any single criteria pollutant. BAFB is currently identified by the APCD as a major Title V source of the PM_{10} precursors NO_X and SO_2 and is subject to Title V Operating Permit No. 950PAR118. This permit was issued on 28 August 1997, most recently reissued as of 01

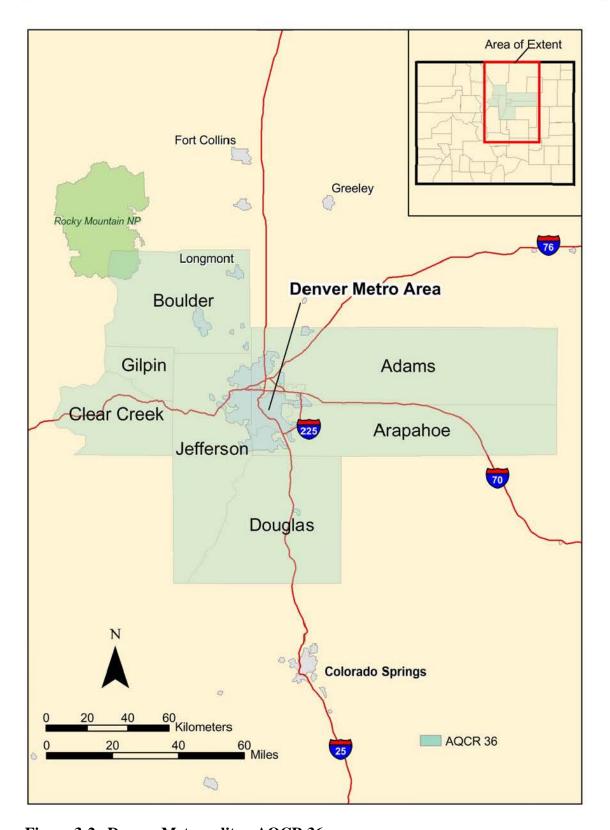


Figure 3-2. Denver Metropolitan AQCR 36

July 2002, and expires 30 June 2007 (BAFB 2001). In July 2002, the CDPHE performed an inspection of stationary source emission units and determined BAFB was in compliance with the Title V permit.

3.3 NOISE

Acoustical noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise intrusive. Human response to noise varies according to the type and characteristics of the noise sources, distance between source and receiver, receiver sensitivity, and time of day. Sound is a physical phenomenon consisting of minute vibrations, which travels through a medium, such as air, and is sensed by the human ear. The ear senses these vibrations as changes in pressure, and as a result sound levels are most commonly referred to as "sound pressure levels."

Sound levels are expressed in units of decibels. The term decibel (dB) implies a logarithmic ratio of the measured pressure to a reference pressure. This reference pressure refers to a pressure that is just barely detectable by the human ear. The human ear responds differently to sounds at different frequencies. This is demonstrated by the fact that we hear higher pitched sounds more easily than lower ones of the same magnitudes. To compensate for the different "loudness" levels as perceived by humans, a standard weighting curve is applied to measured sound levels. This weighting curve represents the human ear's sensitivity and is labeled "A" weighting. The units of magnitude of the sound level are therefore written as dBA ("A" weighted decibels). All sound levels analyzed in this EA are A-weighted unless otherwise noted.

- Day-Night Average Sound Level. In this EA, the day-night average sound level (DNL) is used to describe noise. The DNL is a cumulative metric that accounts for the total sound energy occurring over a 24-hour period, with nighttime noise weighted more heavily to reflect community sensitivity to noise during nighttime hours. Noise levels in excess of DNL 65 are normally unacceptable for noise-sensitive land uses such as residences, schools, and hospitals. Studies of community annoyance to numerous types of environmental noise show that DNL correlates well with percentages of groups of persons highly annoyed (Fidell et al. 1991).
- *Time Averaged Sound Level.* This metric represents a continuous sound level having the same acoustic energy and time interval as the actual fluctuating sound event.
- *Maximum Sound Level*. The highest A-weighted sound level measured during a single event in which the sound level changes value as time goes on (e.g., an aircraft overflight) is called the maximum A-weighted sound level or maximum sound level.

- Speech Interference. Speech interference associated with construction noise is a cause of annoyance to individuals. The disruption of routine activities such as listening or telephone use gives rise to frustration and irritation. The quality of speech communication is also important in classrooms, offices, and industrial settings and can cause fatigue and vocal strain to those who attempt to communicate over the noise. Research has shown that the use of the sound exposure level (SEL) metric will measure speech interference successfully and that an SEL exceeding 65 dBA will begin to interfere with speech communication.
- Noise Annoyance. Noise annoyance is defined by the USEPA (1972) as any negative subjective reaction on the part of an individual or group. As noted in the discussion of DNL above, community annoyance is best measured by that metric. Because the USEPA Levels Document (USEPA 1972) identified DNL 55 dBA as "...requisite to protect public health and welfare with an adequate margin of safety," it is commonly assumed that 55 dBA should be adopted as a criterion for community noise analysis. From a noise exposure perspective, that would be an ideal selection. However, financial and technical resources are generally not available to achieve that goal. Most agencies have identified DNL 65 as a criterion which protects those most impacted by noise, and which can often be achieved on a practical basis (Federal Interagency Committee on Noise [FICON] 1992). Although DNL 65 is widely used as a benchmark for evaluating potential significant noise impact, and is often an acceptable compromise, it is not a statutory limit and it is appropriate to consider other thresholds for particular cases.
- *Hearing Loss.* Noise-induced hearing loss is probably the best defined of the potential effects of human exposure to excessive noise. Federal workplace standards for protection from hearing loss allow a time-average level of 90 dBA over an 8-hour work period, or 85 dBA averaged over a 16-hour period. Even the most protective criterion suggests a time-average sound level of 70 dBA over a 24-hour period (USEPA 1972). Since it is unlikely that receivers will remain exposed to this level for 24 hours per day for extended periods, there is little possibility of hearing loss below DNL 75.

3.3.1 Regulatory Requirements

The Noise Control Act of 1972 (Public Law [PL] 92-574) directs federal agencies to comply with applicable federal, state, interstate, and local noise control regulations. In 1974, the USEPA provided information on negative effects of noise and identified indoor and outdoor noise limits that protect public health and welfare. In addition, sound quality criteria promulgated by the USEPA and the U.S. Department of Housing and Urban Development have identified noise levels to protect public health and welfare with an adequate margin of safety. These levels are considered acceptable guidelines for

assessing noise conditions in an environmental setting. Average acceptable day-night sound pressure levels fall in a range between 50 dBA in quiet suburban areas and 70 dBA in very noisy urban areas (USEPA 1974). Table 3-3 lists some common sound levels associated with everyday activities and devices.

Table 3-3 Common Sound Levels

Common Sound Levels						
Outdoor	dBA	Indoor				
Snowmobile	100	Subway Train				
Tractor	90	Garbage Disposal				
Noisy Restaurant		Blender				
Downtown (Large City)	80	Ringing Telephone				
Freeway Traffic	70	TV Audio				
Power Lawn Mower						
Normal Conversation	60	Sewing Machine				
Rainfall	50	Refrigerator				
Quiet Residential Area	40	Library				

Source: League for the Hard of Hearing 2002

3.3.2 Existing Conditions

The ROI for the existing noise conditions analysis is the project area and adjacent land uses on the installation. Existing noise conditions on BAFB are highly influenced by the operational activities of helicopters. In the absence of these activities, noise due to base activities is generated from surface traffic; maintenance and repair facilities; training areas; heating, ventilation, and air conditioning (HVAC) equipment; and other man-made sources. Additionally, noise is almost entirely restricted to the base.

The project area occurs on land located between the DNL 70 and DNL 75 contour lines on the west side of the airfield (Figure 3-3). The site is generally east of Aspen Avenue and four blocks north of Sunlight Way.

3.4 BIOLOGICAL RESOURCES

3.4.1 Regulatory Requirements

Biological resources play an integral role in the natural environment. The CEQ (1993) recognizes that biological resources, and from them biodiversity, are "...not a series of

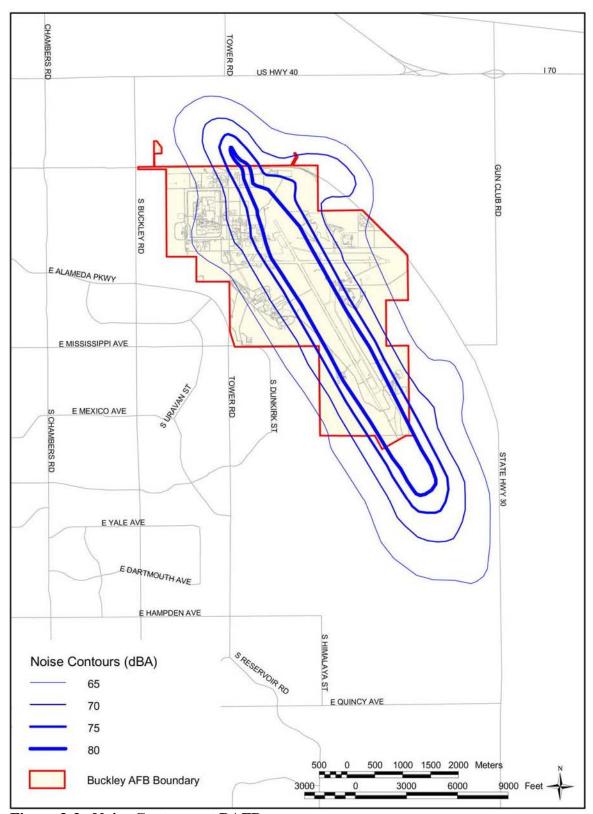


Figure 3-3. Noise Contours at BAFB

unconnected elements, and that the richness of the mix of elements and the connections between those elements are what sustains the system as a whole." The Endangered Species Act (ESA) of 1973 (PL 93-205), as amended, was enacted to provide a program of preservation for endangered and/or threatened species and to provide protection for ecosystems upon which these species depend for their survival. The U.S. Fish and Wildlife Service (USFWS) is responsible for implementing the ESA within the United States and its territories. The USFWS and the Colorado Division of Wildlife (CDOW) maintain protected species lists (endangered, threatened, proposed candidate, or species of concern) for species that occur or could potentially occur within Arapahoe County.

3.4.2 Existing Conditions

The ROI for this resource is the project area and immediately surrounding areas, which are compared to the resources present on the entire installation.

3.4.2.1 Vegetation Communities

The potential climax vegetation community at BAFB would be shortgrass prairie (BAFB 2002c). The historical vegetation at BAFB probably included western wheatgrass (Agropyron smithii) with pockets of buffalo grass (Buchloe dactyloides), blue grama (Bouteloua gracilis), and other grama species (Bouteloua spp.). This vegetation is evident in areas that have not been historically seeded with crested wheatgrass (Agropyron cristatum) or where the vegetation has reverted to a more native stand. Vegetation surveys were conducted at BAFB during 2001, and the vegetation was divided into mixed grass-blue grama/western wheatgrass prairie, crested wheatgrass prairie, bottomland meadows, cottonwood/willows, weedy disturbed areas, and landscaped areas. In general, the mixed grass-blue grama/western wheatgrass prairies are the most diverse plant habitats and occur primarily on upland areas; the crested wheatgrass prairies are more uniform and have few other species associated with them (BAFB 2002c). The seeded crested wheatgrass prairies vegetation type is the largest mapped type on BAFB, and is the type mapped for the project area; however, the project area has been previously disturbed and the density of vegetation is low.

Disturbed areas at BAFB consist of two types: (1) areas disturbed by an excess capacity of prairie dogs and (2) areas disturbed during construction (e.g., project area). These areas are populated by a mix of fringed sagewort (*Artemesia frigida*), cheatgrass (*Bromus tectorum*), field bindweed (*Convolvulus arvensis*), Canada thistle (*Cirsium arvense*), and Russian thistle (*Salsola kali*). In addition, some disturbed areas are populated by Dalmatian toadflax (*Linaria genistifolia* ssp. *dalmatica*) and leafy spurge (*Euphorbia esula*).

3.4.2.2 Threatened and/or Endangered Species

A list of protected and sensitive species that potentially occur in Arapahoe County is presented in Table 3-5. Federal and state-listed species, including candidate and species

of concern, which have been observed at BAFB include bald eagle (*Haliaeetus leucocephalus*), western burrowing owl (*Athene cunicularia*), and black-tailed prairie dog (*Cynomys ludovicianus*). Although these species have been observed within the borders of BAFB, there have been no observations of these species or their habitat near the location of the proposed action. It is doubtful that the remainder of the species listed in Table 3-4 would occur on BAFB other than as migrants or transient visitors (BAFB 2002c; Fayette et al. 2000).

3.5 SOCIAL OR ECONOMIC RESOURCES (INCLUDING ENVIRONMENTAL JUSTICE)

3.5.1 Regulatory Requirements

Socioeconomic analyses generally include detailed investigations of the prevailing population, income, employment, and housing conditions of a community or area of interest. The socioeconomic conditions of a ROI could be affected by changes in the rate of population growth, changes in the demographic characteristics of a ROI, or changes in employment within the ROI caused by the implementation of the proposed action. In addition to these characteristics, populations of special concern, as addressed by Executive Order (EO) 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 1994), are identified and analyzed for environmental justice impacts.

EO 12898 requires a federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high human health or environmental effects of its programs, policies, and activities on minority populations and low income populations." A memorandum from the President concerning EO 12898 stated that federal agencies should collect and analyze information concerning a project's effects on minorities or low-income groups, when required by NEPA. If such investigations find that minority or low-income groups experience a disproportionate adverse effect, then avoidance or mitigation measures are to be taken.

According to the CEQ (1997a), a minority population can be described as being composed of the following population groups: American Indian or Alaskan Native, Asian or Pacific Islander, Black, not of Hispanic origin, or Hispanic, and exceeding 50 percent of the population in an area or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population.

Race and ethnicity are two separate categories of minority populations. A minority population can be defined by race, by ethnicity, or by a combination of the two distinct classifications.

Table 3-4 Federal and State-Listed Species Potentially Occurring in Arapahoe County, Colorado

Common Name (Scientific Name)	Habitat Preferences/ Reason For Decline	Federal Status	State Status	Potentially Suitable Habitat Present?
	Birds			
Bald eagle* (Haliaeetus leucocephalus)	Sea coasts, rivers, and large lakes; nests in tall trees or cliffs near water/habitat destruction, illegal shooting, pesticides	Т	Т	Yes
Interior least tern** (Sterna antillarum)	Sandy/pebbly beaches, inland river sandbars for nesting and shallow water for foraging/riverine alterations, habitat loss, nest disturbance	NL	Е	No
Mountain plover** (Charadrius montanus)	Prairie grasslands, arid plains, and fields; nesting plovers choose shortgrass prairies grazed by prairie dogs, bison, and cattle, and overgrazed tall grass and fallow fields/habitat loss, overgrazing, predation	PT	SC	Yes
Mexican spotted owl** (Strix occidentalis lucida)	Lower elevation forests mostly in deeply incised, rocky canyons; complex forest structures that contain uneven-aged, multi-level, and old-aged thick forests/logging, catastrophic wildfire	Т	Т	No
Piping plover** (Charadrius melodus)	Sandy lakeshore beaches, sandbars within riverbeds, and sandy wetland pastures, all of which must be sparsely vegetated/habitat alteration and destruction, recreational activities near nesting sites	NL	Т	No
Western burrowing owl* (Athene cunicularia)	Primarily found in grasslands and mountain parks, usually in or near prairie dog towns; also uses well-drained steppes, deserts, prairies, and agricultural lands/urbanization, decimation of prairie dog populations	NL	Т	Yes
	Mammals	I		l
Black-footed ferret** (Mustela nigripes)	Closely associated with prairie dog habitat; utilizes prairie dog burrows for nesting/habitat loss, poisoning, canine distemper, plague	Е	Т	Yes
Black-tailed prairie dog* (Cynomys ludovicianus)	Short-grass prairie, they avoid heavy brush and tall grass areas/habitat loss, sport hunting, extermination by ranchers/farmers	С	SC	Yes
Preble's meadow jumping mouse** (Zapus hudsonius preblei)	In and near densely vegetated, shrub-dominated riparian areas/habitat loss	Т	SC	Yes
	Plants	I		l
Colorado butterfly plant** (Gaura neomexicana coloradensis)	Sub-irrigated, alluvial soils of drainage bottoms surrounded by mixed grass prairie; elevation 5,800-6,200 feet/vegetative succession, haying, grazing, herbicide spraying, urban expansion	Т	R/S1	No
Ute ladies'-tresses** (Spiranthes diluvialis)	Open wetland and riparian areas with permanent sub- irrigation; early successional riparian habitats such as point bars, sand bars, and low-lying gravelly, sandy, or cobbly edges/alteration of hydrology, invasive plants, habitat loss, low reproductive rate, loss of pollinators	Т	R/S2	No

C = Federally or state-listed candidate species E = Federally or state-listed endangered species

PT = Proposed threatened R = State-listed as rare

S1 = Critically endangered in state S2 = Endangered or threatened in state

SC = State-listed special concern species (not a statutory category)

 Γ = Federally or state-listed threatened species

NL = Not listed (species may be federally protected, but is not listed by the USFWS as potentially occurring in Arapahoe County)

Sources: CDOW 2002a, 2002b, 2002c; USFWS 2002

Race as defined by the U.S. Census Bureau (2001) includes:

- White A person having origins in any of the original peoples of Europe, the Middle East, or North Africa;
- Black or African American A person having origins in any of the Black racial groups of Africa;
- American Indian or Alaska Native A person having origins in any of the original peoples of North and South America (including Central America) and who maintain tribal affiliation or community attachment;
- Asian A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, or the Philippine Islands; and
- Native Hawaiian and Other Pacific Islanders A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

The U.S. Census Bureau (USCB) defines ethnicity as either being of Hispanic origin or not being of Hispanic origin. Hispanic origin is defined as "a person of Cuban, Mexican, Puerto Rican, South or Central America, or other Spanish culture or origin regardless of race" (USCB 2001).

A minority population can be defined in multiple ways; for example, a population under consideration may be demographically composed of 45 percent Black, 6 percent Asian, 40 percent White, and 9 percent all other races or combination of races. Additionally, a minority population can also be defined through ethnicity, where the population under consideration is demographically composed of 80 percent White, 10 percent Black, and 10 percent all other races or combination of races, but has an ethnic composition of 98 percent Hispanic origin and 2 percent of the population not of Hispanic origin. Race and ethnicity each individually total a population of 100 percent.

Each year the USCB defines the national poverty thresholds, which are measured in terms of household income dependent upon the number of persons within the household. Individuals falling below the poverty threshold (\$12,674 for a household of four in 1990) are considered low-income individuals. USCB census tracts where at least 20 percent of the residents are considered poor are known as *poverty areas* (USCB 1995). When the percentage of residents considered poor is greater than 40 percent, the census tract becomes an *extreme poverty area*.

3.5.2 Existing Conditions

According to the USCB 2000 Census information, BAFB is located in USCB Census Tract 71.02, Block Group 9, Arapahoe County, Colorado (USCB 2002). In the 1990 Census, BAFB was located in USCB Census Tract 71, Block Group 1 (USCB 1993).

3.5.2.1 Population

The general population of Arapahoe County increased by 96,456 persons or 24.6 percent between 1990 and 2000, totaling 487,967 persons (USCB 1993, 2002). Both the urban and rural components of the population increased. The urban component increased 25 percent to 478,124, and the rural component increased 8.5 percent to 9,843; however, this increase was offset by a decrease in the farm population of 27.1 percent to 425 persons (USCB 1993, 2002). The demographic profile of Arapahoe County, USCB Census Tract 71.02, and USCB Block Group 9 are listed in Table 3-5.

Table 3-5
Demographic Profile of the ROI

	0	•			1	
	Arapahoe	County	Census T	Fract 71.02	Block G	roup 9
White, Non-Hispanic	360,187	73.8%	2,974	82.2%	134	53.6%
African American/Black	36,313	7.4%	101	2.8%	75	30.0%
American Indian or Alaska Native	3,250	0.7%	82	2.3%	22	8.8%
Asian	18,693	3.8%	114	3.2%	6	2.4%
All Other Races or Combination of Races	69,524	14.2%	348	9.6%	13	5.2%
Hispanic	57,759	11.8%	288	8.0%	12	4.8%
Total Minority Population	127,780	26.2%	645	17.8%	116	46.4%
Total Population ¹	487,967	100%	3,619	100%	250	100%

Total Population Percentage = Percentage of White, Non-Hispanic + Percentage of Total Minority Population

Source: USCB 2002

3.5.2.2 Income and Employment

All measures of median income (household income, family income, and non-family income) increased by greater than 40 percent in nominal terms between 1990 and 2000 in Arapahoe County (USCB 1993, 2002). Table 3-6 lists the median household incomes and per capital personal incomes for Arapahoe County, USCB Census Tract 71.02, and USCB Block Group 9. Table 3-7 lists the number of family and nonfamily households within the ROI, as well as the total population within these household types.

Earnings data in Arapahoe County between 1990 and 2000 revealed a 124 percent increase in nominal personal income (Bureau of Economic Analysis [BEA] 2002a). Nonfarm personal income increased 124 percent to approximately \$21.6 billion in 2000 (BEA 2002a). Farm income increased 447 percent to approximately \$1.7 million in 2000 (BEA 2002a).

Table 3-6 Median Income Levels for Households and Per Capita Personal Income

	Arapahoe	e County	Nominal Percentage Change	Census Tract 71.02	Block Group 9
	1990	2000		2000	2000
Median Household Income	\$37,234	\$53,570	43.9	\$53,893	\$26,667
Median Family Income	\$44,874	\$63,875	42.3	\$59,022	\$41,250
Median Non-Family Income	\$23,595	\$35,116	48.8	\$24,934	\$16,875
Per Capita Personal Income	\$18,777	\$28,147	49.9	\$23,435	\$12,114

Source: USCB 2002

Table 3-7
Populations within Family and Nonfamily
Households and Number of Households by Persons

Households and Number of Households by Persons							
	Arapaho	e County	Census T	ract 71.02	Block	Group 9	
	Family Households in 2000						
	Number	Percentage	Number	Percentage	Number	Percentage	
2-person	50,370	39.8	346	35.7	3	33.3	
3-person	29,884	23.6	244	25.2	2	22.2	
4-person	27,940	22.1	211	21.8	4	44.4	
5-person	11,830	9.4	96	9.9	0	0.0	
6-person	4,331	3.4	51	5.3	0	0.0	
7+-person	2,113	1.7	20	2.1	0	0.0	
Total Family Households	126,468		968		9		
Total Population within							
Family Households	402,741		3,427		58		
	ĺ	mily Househ				1	
	Number	Percentage	Number	Percentage	Number	Percentage	
1-person	51,389	79.7	187	80.6	13	100.0	
2-person	11,173	17.3	39	16.8	0	0.0	
3-person	1,443	2.2	0	0.0	0	0.0	
4-person	311	0.5	6	2.6	0	0.0	
5-person	92	0.1	0	0.0	0	0.0	
6-person	57	0.1	0	0.0	0	0.0	
7+-person	28	0.0	0	0.0	0	0.0	
Total Nonfamily Households	64,493		232		13		
Total Population within Nonfamily Households	80,394		288		13		

Source: USCB 2002

The industries with the highest percent increase in earnings between 1990 and 2000 were State Government (325 percent); Transportation and Public Utilities (297 percent); Finance, Insurance, and Real Estate (FIRE) (264 percent); and Agricultural Services (211 percent) (BEA 2002a). The only industry reporting a loss of earnings between 1990 and 2000 was Mining (19.1 percent) (BEA 2002a).

Between 1990 and 2000, total full-time and part-time employment increased 62 percent to 389,723 jobs in Arapahoe County (BEA 2002b). The largest percentage employment gains between 1990 and 2000 were in Construction (163 percent); Transportation and Public Utilities (130 percent); State Government (123 percent); and Agricultural Services (108 percent) (BEA 2002b). Two industries reported a percentage loss of jobs, Mining (41 percent) and Farms (15 percent) (BEA 2002b).

Poverty status between 1990 and 2000 in Arapahoe County remained approximately constant at 5.8 percent below the poverty threshold (USCB 1993, 2002). The poverty rate in USCB Census Tract 71.02 was 7.4 percent in 2000, while Block Group 9 had a poverty rate of 8.6 percent (USCB 2002).

3.5.2.3 Housing

The number of housing units in Arapahoe County increased by 28,170 units or 16.7 percent between 1990 and 2000 (USCB 1993, 2002). The occupancy status in 2000 increased to 97 percent, a 5.3 percent increase over the occupancy rate in 1990 (USCB 1993, 2002). Median gross rent increased 58.7 percent between 1990 and 2000 in Arapahoe County to \$735 per month (USCB 1993, 2002). The median value of owner-occupied housing increased by \$79,200 or 85.6 percent between 1990 and 2000 in Arapahoe County (USCB 1993, 2002). The number of housing units in USCB Census Tract 71.02 was 1,256 in 2000, while in Block Group 9 the number of housing units was 27 (USCB 2002).

3.6 LAND USE AND TRANSPORTATION

3.6.1 Regulatory Requirements

Important components of the human built environment include transportation networks, current and future planned land uses, and public services and infrastructure including schools, health care facilities, fire, police, and utilities. Transportation resources include all road networks and public transportation services (e.g., buses and trolleys) within the immediate project area. Implementing the proposed action could slow or reroute traffic through arterial and major thoroughfares. As transportation networks expand, land use patterns develop. As with other resources, land is not available in unlimited quantities. Because of this, land use must be properly planned and controlled. The CEQ regulations recognize this need for the rational management of land resources and have provided for a specific consideration of the relationship of a changed pattern in land uses, which

requires knowledge and understanding of existing and projected land capabilities and land use patterns.

Land use patterns are natural or imposed configurations resulting from spatial arrangement of the different uses of land at a particular time. Land use patterns typically evolve as a result of: (1) changing economic considerations inherent in the concept of highest and best use of land, (2) imposing legal restrictions (zoning) on the uses of land, and (3) changing (zoning variances) existing legal restrictions. The critical consideration is the extent to which any changes in land use patterns resulting from implementation of an action are compatible with existing adjacent uses and are in conformity with approved or proposed land use plans. Land use describes the activities that take place in a particular area and generally refers to human modification of land, often for residential or economic purposes. It also refers to use of land for preservation or protection of natural resources. It is important as a means to determine if there is sufficient area for proposed activities and to identify any potential conflicts with local land use plans. Visual resources refer to the aesthetic appearance of a setting, both artificial and natural. It includes the existing landscape and addresses the potential viewers of and from the project areas. Implementing the proposed action could affect adjacent sensitive land uses, such as recreational or residential uses.

At the USAF installation level, a General Plan is prepared to guide future development while maintaining a focus on the missions and tenant support activities that occur on a military base. The General Plan incorporates detailed databases, documents, and graphics prepared by USAF regulatory programs. Among the factors examined are the ongoing constraints to any development that are imposed by the airfield safety areas, ordnance storage safety areas, environmentally sensitive sites and sites contaminated from previous activities that require remediation of environmental deficiencies. To address the unique set of accident potential and aircraft noise considerations raised by ongoing operations at its airfields, the USAF provides land use recommendations to adjacent localities and its own facilities planning boards through the Air Installation Compatible Use Zone (AICUZ) Program. The guidelines recommend land uses that are compatible with airfield operations while allowing maximum beneficial use of adjacent properties (USAF 1999).

3.6.2 Existing Conditions

The ROI for this resource area is entirely within the installation boundaries due to the interior location of the project area.

3.6.2.1 Land Use

BAFB lies adjacent to the City of Aurora, approximately 8 miles east of the Denver/Aurora corporate boundaries in Arapahoe County. As such, BAFB is part of an inner suburb of a large city. Accordingly, the area has a suburban character with motor vehicles providing the principal means of transportation and influencing the design of the

roadways, land uses, site layouts, and building designs. BAFB is bounded on the northeast by Colorado State Route 30 (6th Avenue), directly east and south by privately held real estate and the Plains Conservation Center, and on the west by undeveloped land owned by the City of Aurora and the State of Colorado (Tower Road, Buckley Road). An airfield has been active at BAFB since the early 1940s.

With a contiguous landmass of approximately 3,283 acres, and its attributes as host to a significant commuter employee population and service center for a military retirees population, BAFB is a significant land use in its own right in any community. BAFB functions as a compact community of interest and has many characteristics of a small city. As the 460 ABW continues its new role as host unit for the installation with the resulting base population growth and facilities construction, this aspect will become more pronounced.

The land uses along the northern boundary of BAFB are largely industrial; however, there is a significant amount of open space and grassland conservation area. To the east, the land is largely unimproved with a scattered commercial and industrial character. To the south, the land is less developed, with a conservation area. To the west, the land uses are generally commercial along the primary and arterial streets and residential on the secondary streets. The City of Aurora is rapidly growing from west to east and its development is expected to continue its progression from around BAFB toward the less developed areas to the east. Two significant factors account for this growth: the opening of the Denver International Airport, 10 miles northeast of BAFB, and the development along the E-470 Bypass.

Currently, BAFB lacks many of the amenities associated with an active-duty USAF installation. The closure of nearby Lowry AFB in 1994 and Fitzsimons Army Medical Center in 1999 is resulting in a consolidation of functions on BAFB and a consequent need for additional facilities construction. The existing land use pattern on BAFB generally is that the COANG and reserve facilities are east of Aspen Avenue, and the active-duty facilities are on the west side. Most of the development focus on BAFB was in the northwest corner formed by the intersection of the main runway 14/22 and the now-inactive crosswind runway. Over two-thirds of the base land is open space or vacant. Table 3-8 presents the land use categories and approximate sizes on BAFB based on the General Plan (BAFB 2002b).

Land use activities most sensitive to high levels of ambient noise exposure are residential, public services, commercial, and cultural and recreational uses. In airport noise analyses, noise contours are typically used to determine compatibility of aircraft operations with local land uses. This would include on-base land uses. The predicted noise exposure level is shown in the General Plan and is one of the constraints recognized in siting construction projects. Based on guidelines adopted jointly by the Federal Aviation Administration, the Department of Defense, and the USEPA, any land use lying in an

Table 3-8
BAFB Land Use Inventory

Land Use Category	Typical Facilities and Features	Total Acres
Administrative	Personnel, headquarters, legal, and other support activities	201
Aircraft Operations / Maintenance	Aircraft maintenance hangars and docks, control towers, flight training facilities, and flight operations buildings	52
Airfield	Associated runway primary surfaces and safety areas	962
Airfield Pavements	Runways, taxiways, and aircraft parking aprons	228
Community Commercial	Commissary, base exchange, service stations, clubs, chapels, and library	50
Community Service	Child care centers, and educational centers	91
Housing – Accompanied	Single- and multi-family housing units for accompanied permanent party service members	65
Housing – Unaccompanied	Dormitories and unaccompanied officers quarters	81
Industrial	Utility systems, building maintenance facilities, and base support supply warehouses	352
Medical	Medical centers, clinics, and hospitals	14
Mission Operations and Maintenance (Admin)	High security areas	169
Open Space	Buffer areas, out-lease areas	716
Outdoor Recreation	Swimming pools, tennis courts, golf course, and other active recreation facilities	377
Water	Rivers, lakes, and streams	8

Source: BAFB 2002b

area of less than DNL 65 noise exposure is thought to be compatible. Between DNL 65 and DNL 80, the mix of compatible uses changes to the point that very few uses are compatible at the higher end of the range.

Table 3-9 presents the relationship between recommended land use classifications and noise exposure levels. Section 3.3, Noise, presents a discussion of noise terminology and metrics. As mentioned earlier, the project area occurs on land located between the DNL 70 and DNL 75 contour lines on the west side of the airfield. The site is generally east of Aspen Avenue and four blocks north of Sunlight Way.

3.6.2.2 Transportation Resources

Transportation resources refer to the infrastructure and equipment required for the movement of people, raw materials, and manufactured goods over water, across the surface of the earth, or through air. Particular emphasis for this analysis is given to the road networks in the region of and on BAFB. The ROI for transportation includes all of the roadways on BAFB and in the immediate vicinity of the base. It also includes the major routes in the area that could be affected by the proposed action.

Table 3-9
Land Use, Noise, and Accident Potential Compatibility Guidelines

Generalized	Clear			DNL Noise Contours (dBA)			BA)
Land Use	Zone	APZ I	APZ II	65-70	70-75	75-80	80+
Residential	No	No	Yes ¹	No ²	No ²	No	No
Manufacturing	No	Yes ³	Yes ³	Yes	Yes	Yes	Yes
Transportation, Communications, and Utilities	No	Yes ³	Yes ³	Yes	Yes	Yes	No
Trade, Business, and Offices	No	Yes ³	Yes ³	Yes	Yes	Yes	No
Shopping Districts	No	No	Yes ³	Yes	Yes	Yes	No
Public and Quasi- Public Services	No	No	Yes ³	Yes	No ²	No ²	No
Recreation	No	Yes ³	Yes ³	Yes	Yes	No	No
Public Assembly	No	No	No	Yes	No	No	No
Agricultural and Mining	No ⁴	Yes ³	Yes ³	Yes	Yes	Yes	Yes

Suggested maximum density is 1 dwelling unit per acre

Source: USAF 1999

Interstate 225, the major north-south artery, provides access to and from the Aurora area. Other important road networks providing access to the area are Interstate 25 to the south and Interstate 70 to the north. Interstate 25 is a north-south highway that runs from Texas to Wyoming. Interstate 70 is an east-west highway that runs from Maryland to Utah. Denver International Airport, which is located approximately 17 miles to the north of BAFB, provides worldwide commercial air transportation. Denver Union Station is located approximately 17 miles west of BAFB and offers interstate passenger rail service.

The Regional Transport District (RTD) provides mass transit in the Aurora area. The RTD is a public agency created to operate as a public transportation system. The RTD operates in a seven-county service area. The RTD Local Route 10 provides daily service throughout the Denver metropolitan area. The RTD has one stop on BAFB at the Base Exchange/Commissary (Figure 3-4) (RTD 2002).

Interstate 225 and the local community are connected to BAFB by two main streets, 6th Avenue to the north and Mississippi Avenue to the south. Access to BAFB is available via gates at the intersections of Aspen Avenue and Sixth Avenue (North Gate) and Aspen Avenue and Mississippi Avenue (South Gate). Of the traffic entering and departing the installation, 67 percent uses the North Gate (BAFB 2002b). Aspen Avenue is a 4-lane, divided street running north to south from the North Gate to the central base and continuing around the southeast end of the base to meet Silver Creek Drive just south of the Mississippi Avenue Gate. All vehicles entering and departing the installation must

Limited agricultural uses are permitted

² Unless sound attenuation materials are installed

Only limited low-density, low-intensity uses recommended

use Aspen Avenue. Breckenridge and Steamboat avenues distribute traffic from Aspen Avenue to the major industrial and flightline areas (BAFB 2002b).

3.7 PUBLIC UTILITIES

The ROI for this resource area includes those services that are used on the installation. Xcel Energy provides the main source of electrical energy to BAFB. Six metering points serve various areas of the installation, which is the largest power user from the substation located at the intersection of Colfax Avenue and Interstate 225 (USAF 1998). Xcel Energy also provides the installation with natural gas through a 4-inch gas main located beneath 6th Avenue (USAF 1998).

BAFB obtains potable water from the City of Aurora. Nine reservoirs and lakes provide Aurora with 44.6 billion gallons of storage capacity. Daily water is transported from these reservoirs, natural river systems, pipes, tunnels, and pumps to meet the city's daily needs. Before distribution to the public water supply system the water is treated and analyzed for various constituents to ensure compliance with federal, state, and local health department standards (City of Aurora 2002).

There are two wastewater outflows on BAFB, one servicing the northern portion of the installation and one servicing the southern portion of the installation. The project area would be within the southern service area. The wastewater is treated at the Metro Wastewater Reclamation District wastewater treatment plant, which discharges treated effluent to the South Platte River (USAF 1998). Monitored wastewater discharge points revealed that wastewater discharge levels for BAFB range from 3.56 million gallons for months during the winter, spring, and fall to 9.8 million gallons for the summer months, such as July.

BAFB disposed of approximately 1,477 tons of non-hazardous municipal solid waste (MSW) in regulated landfills during FY 02. BAFB diverted approximately 514 tons of MSW and construction debris from regulated landfills through recycling and reuse programs during FY 02.

3.8 HAZARDOUS MATERIALS AND SUBSTANCES

3.8.1 Hazardous Materials and Hazardous Wastes

3.8.1.1 Regulatory Requirements

Concerns over the improper handling and disposal of solid and hazardous wastes that posed a continuing threat to the environment and a danger to human health led to the enactment of the RCRA of 1976. The RCRA replaced the Solid Waste Disposal Act and authorized the USEPA to provide for cradle-to-grave management of hazardous waste and set a framework for the management of nonhazardous municipal solid waste. Under

RCRA, a waste is defined as hazardous if it is ignitable, corrosive, reactive, toxic, or listed by the USEPA as being hazardous. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 and the Superfund Amendments and Reauthorization Act (SARA) of 1986 authorize the USEPA to respond to spills and other releases of hazardous substances to the environment. It also authorizes the National Oil and Hazardous Substances Pollution Contingency Plan. Title III of SARA authorizes the Emergency Planning and Community Right-to-Know Act (EPCRA), which requires facility operators with hazardous substances to prepare comprehensive emergency plans and to report accidental releases. EO 12856 (Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, August 1993) requires federal agencies to comply with the provisions of EPCRA.

Title I of the Toxic Substance Control Act (TSCA) established requirements and authorities to identify and control toxic chemical hazards to human health and the environment. The TSCA authorized the EPA to gather information on chemical risks, require companies to test chemicals for toxic effects, and regulate chemicals with unreasonable risk. The TSCA also singled out PCBs for regulation and as a result are being phased out. The TSCA and its regulations govern the manufacture, processing, distribution, use, marking, storage, disposal, cleanup, and release reporting requirements for numerous chemicals like PCBs. PCBs are persistent when released into the environment and accumulate in the tissues of living organisms. They have been shown to cause adverse health effects on laboratory animals and may cause adverse health effects in humans. TSCA Title IV, "Lead Exposure Reduction," directs federal agencies to "conduct a comprehensive program to promote safe, effective, and affordable monitoring, detection, and abatement of lead-based paint and other lead exposure hazards." Further, any federal agency having jurisdiction over a property or facility must comply with all federal, state, interstate, and local requirements concerning LBP.

3.8.1.2 Existing Conditions

The ROI for this resource area includes only the installation. Activities at BAFB that would pose the greatest potential threat to the local environment are the transfer and storage of petroleum, oil, and lubricant (POL) materials and the storage of hydrazine. Industrial activities at BAFB fall into four general categories: aircraft maintenance, vehicle maintenance, facility maintenance, and POL operations. Specific waste streams are generated within each activity. The base has implemented several environmental programs (e.g., spill prevention control and countermeasures plan, stormwater pollution prevention, and hazard waste management) that aid in the prevention of hazardous materials/waste releases to the environment. A database search of the entire installation was performed for the H-70 Fuel Storage Facility/Medical Pharmacy EA, dated March 2003.

During FY 02, BAFB purchased approximately 26 tons of hazardous materials and disposed of 3.5 tons of hazardous wastes. Additionally, during this period BAFB used

approximately 926 pounds of regulated pesticides and approximately 33 tons of regulated Class I ozone-depleting substances (ODS).

3.8.2 Asbestos

3.8.2.1 Regulatory Requirements

ACM and ACM abatement is regulated by the USEPA and the OSHA. The state of Colorado also has regulations pertaining to ACM abatement. Emissions of asbestos fibers into the ambient air are regulated in accordance with Section 112 of the CAA, which established the National Emissions Standards for Hazardous Air Pollutants (NESHAP). The NESHAP addresses the demolition or renovation of buildings containing ACM. TSCA Title II provides statutory framework for "Asbestos Hazard Emergency Response," which applies only to schools. The CDPHE, APCD, administers the state's asbestos abatement regulation (Colorado Regulation No. 8, Part B). These regulations cover demolition activities and are more stringent than the NESHAP program. The current USAF practice is to manage or abate ACM in active facilities, and abate ACM per regulatory requirements prior to facility demolition. Abatement of ACM occurs when there is a potential for asbestos fiber releases that would affect the environment or human health.

3.8.2.2 Existing Conditions

The project area most likely has not been disturbed by past construction or demolition activities associated with World War II facilities. Therefore, although asbestos-coated piping associated with these types of older structures has been found in the northwestern corner of the BAFB, there is a low probability that any pipes would be encountered during subsoil activities within the project area. Conclusions from an ongoing ERP basewide preliminary assessment are not currently know; however, if ongoing ERP assessments reveal concerns within areas proposed for construction, the concerns will be addressed on a case-by-case basis.

3.9 RESOURCES ELIMINATED FROM DETAILED ANALYSIS IN THIS ENVIRONMENTAL ASSESSMENT

3.9.1 Groundwater Resources

BAFB is underlain by aquifers of the Denver Basin aquifer system specifically the main underlying aquifers are the Denver aquifer and the Arapahoe aquifer (U.S. Geological Survey [USGS] 1995). The water bearing layers of these two aquifers are approximately 150 to 175 feet thick (USGS 1995). BAFB has five non-tributary wells; however, as mentioned previously, BAFB receives potable water from the City of Aurora. Depth to groundwater is greater than 20 feet below ground surface and therefore there would be no anticipated impacts to this resource area from implementation of the proposed action or

alternative. Since there would be no anticipated adverse impacts to this resource area, it has been eliminated from detailed analysis in this EA.

3.9.2 Wetlands

A base-wide jurisdictional determination by the USACE has not been made for BAFB; however, there are no potentially jurisdictional waters of the United States within or adjacent to the project area. The nearest potentially jurisdictional water of the United States is the unnamed tributary to East Toll Gate Creek, approximately 800 feet north. The nearest potentially jurisdictional special aquatic site (e.g., potentially jurisdictional wetland) is on East Toll Gate Creek, approximately 1,800 feet southwest. Since there are no wetlands located within or adjacent to the project area, this resource area has been eliminated from detailed analysis in this EA.

3.9.3 Floodplains

As discussed previously, the unnamed tributary to East Toll Gate Creek is the closest surface water feature to the project area. Floodplain maps are currently available for East Toll Gate Creek directly downstream of BAFB. Based on a review of these maps and previous field observations, it is probable that floodplains of this creek on BAFB would be the width of the incised channel or only somewhat wider (BAFB 2002c). Since this tributary is approximately 800 feet north of the project area, the project area would be outside the 100-year floodplain boundaries of this feature. Since the project area lies outside of any 100-year floodplains, this resource area has been eliminated from detailed analysis in this EA.

3.9.4 Soils

Due to the disturbed nature of the project area, it is unlikely that the soil conditions have not been previously impacted. The original soil type of the project area would have been mapped as Fondis silt loam, 1 to 3 percent slopes. These are well-drained soils occurring mainly on uplands, with a surface layer approximately 7 inches thick and upper clay subsoil about 20 inches thick. These soils have moderate runoff and water intake, and the hazards of soil blowing and water erosion are slight to moderate (U.S. Department of Agriculture [USDA] 1971). Implementation of the proposed action or the no action alternative would not cause any further significant impacts to the soils resources within or immediately adjacent to the project area.

3.9.5 Historic or Archeological Resources

Also, due to the disturbed nature of BAFB, there are no intact cultural resources deposits or locations on BAFB. A full account of installation cultural resources and cultural

resources management is provided in the Integrated Cultural Resources Management Plan (BANGB 2000).

3.9.6 Environmental Restoration Program

The installation currently has an ERP to handle contaminated soil and groundwater sites. Additionally, two environmental database radius map searches were performed, one centered at the northwest corner of BAFB and one centered near the Building 1005 on Aspen Street. The northern search revealed two Resource Conservation Recovery Information System (RCRIS) small quantity generator facilities within a quarter mile of BAFB - Altec, Incorporated at 641 North Telluride Street and Dan's Auto Body at 509 Buckley Road, Unit F- neither with any violations. The north database search revealed multiple sites at BAFB that were unmapped due to inadequate address information.

The southern search also revealed multiple listings for BAFB. The CERCLA information system listing is a site along the northern installation boundary with potential groundwater contamination (ERP Site 10). BAFB was also listed as a leaking underground storage tank site and in the Spills Database for the Department of Public Health and Environment. More specifically, this listing detailed a fuel spill from a 1,000-gallon aboveground storage tank into a containment area due to operator error. The spilled fuel was pumped out by a contractor (Thermal Fluids) and the case is considered closed. Additionally, listings for BAFB include a SQG and a finding, which is directly linked to ERP Site 10.

Since none of the listed ERP sites are within the project area there would be no impacts associated with implementing the proposed action or alternative. As such, the ERP program and sites have been eliminated from detailed analysis in this EA.

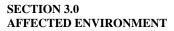
3.9.7 Radon

Radon is an invisible, odorless, radioactive gaseous form of radium and its short-lived decay products are produced by the natural disintegration of the element radium, which occurs in air, water, soil, and other media. If structures show radon levels over 4.0 pico-Curies per liter (pCi/l), appropriate radon mitigation actions should be implemented. An elevated concentration is defined as being at or above the USEPA suggested guidelines of 4.0 pCi/l. Soil gas entering homes through crawl spaces, through cracks and openings in slab-on-grade floors, and through below-grade walls and floors is the primary source of elevated radon levels. Radon moves into a building due to lower indoor air pressure resulting from heated air rising, wind, air used by fireplaces and wood stoves, or airvented to the outside by clothes dryers and exhaust fans in bathrooms, kitchens, or attics.

TSCA Title III, "Indoor Radon Abatement," states indoor air in buildings of the United States should be as free of radon as the outside ambient air. Federal agencies are required to conduct studies on the extent of radon contamination in buildings they own. In

addition to the TSCA, radon is regulated under the Radon Gas & Indoor Air Quality Research Act of 1986 (42 USC §7401), EO 12088 (Federal Compliance with Pollution Standards, October 1978), RCRA, and the Solid Waste Disposal Act (42 USC §6982).

Arapahoe County is in USEPA Zone 1 for radon, which lists the average indoor radon level as greater than 4.0 pCi/l. Three samples tested for radon in zip code 80011 showed that average activity at basement level for one sample was less than 4.0 pCi/l, while the other two samples were between 4.0 pCi/l and 20.0 pCi/l (EDR 2002). Since neither the hazardous materials issue facility, nor the hazardous wastes storage facility would be occupied 8 hours a day or more, impacts associated from radon have been eliminated from detailed analysis in this EA.



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SECTION 4.0 ENVIRONMENTAL CONSEQUENCES

This section of the EA forms the basis for the comparison of the alternatives identified in Section 2.3. As previously mentioned, project area is a one-acre site adjacent to Building 1005. The discussion presented includes the potential environmental impacts from implementing the no action alternative and the proposed action. Table 4-1 provides a summary of the environmental consequences associated with implementing those alternatives carried forward for detailed analysis. As demonstrated in Table 4-1, none of the alternatives carried forward for detailed analysis would result in significant impacts to the environment.

Table 4-1
Alternatives Comparison Matrix Summary

Afternatives Comparison Matrix Summary						
Environmental Attributes	No Action	Proposed				
(Threshold Criteria)	No Action	Action	Alternative 1			
Hydrologic Resources						
(number of surface water features affected)	0	0	0			
(change in physical or biological water quality parameters)	No	No	No			
(substantial increase in stormwater flow)	No	No	No			
(substantial alteration of localized drainage patterns)	No	No	No			
Air Quality						
(increase above de minimis standards)	No	No	No			
Noise						
(permanent increase to unacceptable levels)	No	No	No			
(within compatible noise contour or design adjustments						
made)	Yes	Yes	Yes			
Biological Resources						
(acres of vegetation communities affected)	0	1	1			
(number of threatened and/or endangered species affected)	0	0	0			
Social and Economic Resources (Including Environmental						
Justice)						
(unacceptable change in personal income or employment)	No	No	No			
(number of minority and/or low-income populations						
affected)	0	0	0			
Land Use and Transportation Resources, and Public Services						
and Infrastructure						
(consistent with adjacent land uses [current and planned])	No	Yes	Yes			
(unacceptable change in level of service)	No	No	No			
Public Utilities						
(unacceptable change in the level of service)	No	No	No			
Hazardous Materials						
(existing solid/hazardous waste and debris removed)	Yes	Yes	Yes			
(number of federal and/or state database-listed sites						
affected)	0	0	0			
(ACM removed and remediated, if present)	No	Yes	Yes			
(building design minimizes exposure to radon)	N/A	Yes	Yes			

N/A = not applicable

4.1 SURFACE WATER RESOURCES AND STORMWATER QUALITY

Implementation of a proposed action and/or alternatives could result in the disturbance of localized surface water features through ground-disturbing activities and in an increase of impervious cover within the project areas. Water features could receive silt from or have drainage patterns affected by ground-disturbing activities. Localized water features could also contain federally protected species or support important riparian habitat. Potential effects to water resources in the project areas will be quantified in this EA by acreage and/or linear distance of surface waters affected and/or by an unacceptable rise in the level of physical and biological parameters as defined by the USEPA. Additional significance thresholds include the creation of excess stormwater runoff that would exceed the capacity of existing or planned stormwater drainage systems, excess stormwater that would result in flooding either on site or off site, and substantial alteration of localized drainage patterns. The ROI for this resource area was the portion of the installation west and south of the airfield containing the project area.

4.1.1 No Action

Selecting the no action alternative would result in no significant long-term impacts to hydrologic resources. If current activities are maintained at separate locations, there would be an increased probability of a spill occurring during the transportation of hazardous materials/hazardous wastes, which could impact surface water resources, especially features that drain from the installation.

4.1.2 Proposed Action

Implementing the proposed action would result in no significant impacts, either short- or long-term, to surface water resources or stormwater quality. As discussed earlier, in accordance with the NPDES requirements, a SWPPP would be implemented to reduce the potential for short-term soil erosion and contaminated stormwater flows during construction activities. All hazardous materials would be handled according to federal, state, and local guidelines and all hazardous wastes would be disposed of at an approved landfill to minimize the potential for surface or groundwater contamination from these sources during construction activities. Through implementation of the proposed action, the long-term probability of a hazardous materials/hazardous wastes spill would be reduced due to lower transit times and less handling of materials. Additionally, design of the facility would include appropriate spill prevention and containment features to reduce the potential for material loss from the site during facility operations.

4.1.3 Alternative 1

Implementing this alternative would result in no significant impacts to surface water resources. Potential environmental consequences would be similar to those of the proposed action.

4.2 AIR QUALITY

Impacts to air quality would be considered significant if any criteria pollutant emissions associated with the implementation of the proposed action or alternatives would exceed the rates specified for attainment/maintenance areas for CO, O₃, and PM₁₀, would be regionally significant, or would contribute to a violation of the Title V permit limitations. The ROI for this resource was the installation, which was compared to emissions in Arapahoe County and the Metropolitan Denver AQCR.

The air quality analysis examined impacts from air emissions associated with the construction and operation of the H-70 fuel storage facility and the medical pharmacy on BAFB. As part of the analysis, emissions generated from construction, motor vehicles, and other (non-mobile) sources were examined for CO, volatile organic compounds (VOCs), SO₂, NO_x, and PM₁₀.

4.2.1 No Action

Selecting the no action alternative would result in no significant impacts to ambient air quality conditions of the project area or surrounding areas since no construction activities would be undertaken. Ambient air conditions would remain as described in Section 3.2.

4.2.2 Proposed Action

Implementing the proposed action would have a minor, temporary (short-term) impact on local air quality; however, emissions are not expected to exceed the long-term rates specified for attainment/maintenance areas for CO, O_3 , and PM_{10} , be regionally significant, or contribute to a violation of Title V permit limitations. The primary impact would be directly related to the generation of PM_{10} at and around the project areas during the preliminary stages of construction. These emissions would primarily be a function of (1) construction activities, such as grading and excavation; (2) movement of dust (wind erosion) from 'piled' materials; and (3) mechanical entrainment of road dust.

4.2.2.1 Construction Activities

The potential air quality impact resulting from construction activities would be minor, would be temporary, and would disperse with distance from the project area. Implementing BMPs such as proper maintenance of construction vehicles, limiting the

size of the disturbance area, and watering unpaved roadways, as necessary, would minimize potential impacts.

USEPA AP-42 states that factors for fugitive dust emissions from heavy construction operations can be conservatively expressed in terms of total suspended particulate (TSP). The TSP emissions from construction-based activities depend on a number of considerations including, but not limited to:

- The number and type of vehicles (earthmovers);
- The construction activity (demolition and debris removal, site preparation, and general construction);
- The materials used (asphalt, concrete);
- The controls utilized to minimize fugitive emissions from area sources (watering exposed soils); and
- The installation of asphalt pavement.

Watering the disturbed area twice per day with approximately 3,500 gallons per acre would reduce TSP emissions by as much as 50 percent (USEPA 1995). A PM_{10} emissions factor of 0.6 ton per acre per year (5.18E-5 grams per square meter per second [g/m²s]) was estimated for this activity with sufficient watering (USEPA 1995). Fugitive particle emissions due to the heavy construction activities are the only anticipated sources of emissions during the construction phase of the proposed action. These increases would not significantly contribute to a violation of Title V permit limitations (Table 4-2).

Table 4-2 Construction PM₁₀ Emissions for Stationary Sources

PM ₁₀ Emissions	TPY
Baseline ¹	12.0
Proposed Construction	2.2
Projected Total	14.2
Title V Permit Limits	99.9

Total Stationary Source Emissions at BAFB (BAFB 2001)

TPY = tons per year

The USEPA recommends using the modified Pasquill-Gifford plume model outline in its guidance to "apply a simple screening procedure ... to determine if either (1) the source clearly poses no air quality problem or (2) the potential for an air quality problem exists" (USEPA 1995). The analysis was based on a worst-case scenario with the construction footprint being 1.0 acre. The SCREEN3 computer model (USEPA) was used to estimate the downwind concentrations of PM_{10} using the following assumptions, and have been illustrated in Figure 4-1.

• Average Wind Speed 3 miles per hour (1.34 meters/second)

Receptor Height 1.5 meters

• Source Height 10 meters

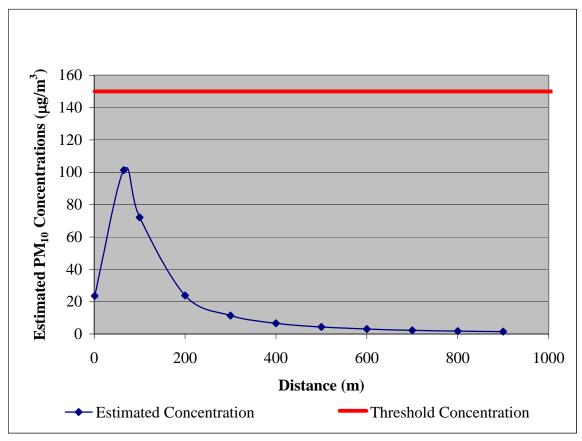


Figure 4-1. Estimated PM₁₀ Concentration vs. Distance

The maximum PM_{10} concentration of 101 microgram per cubic meter ($\mu g/m^3$) at a distance of 65 meters from the fence line was compared to the primary and secondary NAAQS PM_{10} for 24 hours of 150 $\mu g/m^3$. Since the maximum-modeled concentration is below the NAAQS for particulates, a potential for an elevated local concentration for PM_{10} would not be anticipated for this temporary activity. No decrease in visibility and subsequently no impact to airfield operations or aircraft safety would be anticipated for the proposed action. Because the grading and construction activities are low to the ground, these estimated concentrations would drop off rapidly in a short distance; as a result, temporary impacts would be local and not regional. These estimates are averages, and at any instant, actual instantaneous concentration is likely to be higher or lower based on local wind conditions.

Combustive emissions from construction equipment exhausts were estimated using emissions factors for diesel-powered off-road equipment (USEPA 1991; Waier 2001).

The USEPA assumes that 230 working days (8 hours per day) are available per year for construction (accounting for weekends, weather, and holidays) (USEPA 1995). Criteria pollutant emissions associated with the implementation of the proposed action or alternatives do not exceed the rates specified for attainment/maintenance areas for CO, O₃, and PM₁₀ (Table 4-3). The proposed action is not regionally significant because the emissions do not exceed 10 percent or more of the attainment/maintenance area's total emissions for that particular pollutant (AQCR 36) (Table 4-4).

Table 4-3
Total Construction Emissions Compared to Applicability Thresholds

Criteria Pollutants	Applicability Threshold (tpy)	Total Construction Emissions (tpy)	Violates Applicability Threshold
NO_x	100	1.3	No
SO_2	100	0.5	No
VOCs	50(100)	0.3	No
CO	100	2.0	No
PM_{10}	100	2.2	No

tpy = tons per year

Table 4-4
Total Construction Emissions Compared to AQCR 36 Total Emissions

Criteria Pollutants	AQCR 36 Total Emissions* (tpd)	Construction Emissions (tpd)	Percent Total	Regionally Significant
NO_x	313	0.0035	0.0011	No
SO_2	180	0.0013	0.0008	No
VOCs	507	0.0008	0.0002	No
CO	1203	0.0054	0.0005	No
PM_{10}	70	0.0060	0.0086	No

^{*}Colorado Air Quality Control Commission (CAQCC) 2000, 2001a, 2001b tpd = tons per day

4.2.2.2 Facilities Operation

There would be minor indirect emissions from support services after completion of construction activities. Additional heating and cooling of the hazardous materials issue facility and the hazardous wastes storage facility would be necessary. A conservative estimate of 0.25 million British thermal units (MMBTU) per hour would be necessary for heating and cooling of the buildings. An increase in base wide natural gas usage of 165,000 cubic feet per year would be expected from operational activities. This would not exceed the rates specified for attainment/maintenance areas for CO, O₃, and PM₁₀, would not be regionally significant, or would not significantly contribute to a violation of Title V permit limitations (Table 4-5).

Table 4-5
Emissions from Anticipated Support Services

Constituent	Emission Factor (lb/10 ⁶ ft ³)	Total Increase in Emissions (tpy)
CO	40.0	0.00330
NOx	94.0	0.00775
PM_{10}	7.6	0.00062
SO_x	0.6	0.00005
VOC, non-methane	5.5	0.00045

lb = pound $10^6 = 1,000,000$ $ft^3 = cubic feet$ tpy= tons per year

Although many of the materials that will be stored at the facility are regulated by the USEPA and the CDPHE, the storage of the waste and other materials is not expected to have significant impacts to the existing air quality. There is a slight potential for the hazardous materials to have an air quality impact if there is a spill; however, spill response, hazardous waste management and facility response plans are in place to maximize confinement the materials in the event of a spill.

There are 188 hazardous air pollutants (HAPs), also known as toxic air pollutants, specifically listed by the USEPA pursuant to Title III of the CAA amendments. HAPs are pollutants that cause or may cause serious health effects and have adverse environmental or ecological effects. HAPs emitted by natural gas boilers include arsenic, cadmium, chromium, lead, manganese, mercury, and nickel. Estimated organic and inorganic HAP emissions that would result from implementing the proposed action, which are estimated at 0.000156 tons per year are listed by individual organic and inorganic component in Tables 4-6 and 4-7.

The additional HAP emissions constitute less than 0.1 percent of the entire on-base HAP emissions, which is 0.83 tons per year at BAFB. However, the USEPA is proposing national emission standards for HAP (NESHAP) for industrial/commercial/institutional boilers and process heaters. The proposed rule would implement Section 112(d) of the CAA by requiring all major sources to meet HAP emission standards reflecting the application of the maximum achievable control technology (MACT) (Federal Register 68:8, Monday, 13 January 2003). BAFB should continually review the regulatory changes in this area to ensure compliance with respect to current, proposed, and reasonably foreseeable HAP emissions.

Table 4-6
Organic HAP Emission Rate Calculations

Constituent	Emission Factor (lb/10 ⁶ ft ³)	Fuel (10 ⁶ ft ³)	Total Increase in HAP Emissions (tpy)
Benzene	2.00E-03	0.165	1.73E-07
Dichlorobenzene	1.00E-03	0.165	9.90E-08
Formaldehyde	7.50E-02	0.165	6.19E-06
Hexane	1.80E-01	0.165	1.49E-04
Naphthalene	6.10E-04	0.165	5.03E-08
Polycyclic Organic Matter	8.85E-05	0.165	7.30E-09
Toluene	3.40E-03	0.165	2.81E-07
		Total	1.55E-04

lb = pound $10^6 = 1,000,000$ $ft^3 = cubic feet$ tpy = tons per year

Table 4-7
Inorganic HAP Emission Rate Calculations

Constituent	Emission Factor (lb/10 ⁶ ft ³)	Fuel (10 ⁶ ft ³)	Total Increase in HAP Emissions (tpy)
Arsenic	2.00E-04	0.165	1.65E-08
Beryllium	1.20E-05	0.165	9.90E-10
Cadmium	1.10E-03	0.165	9.08E-08
Chromium	1.40E-03	0.165	1.16E-07
Cobalt	8.40E-05	0.165	6.93E-09
Lead	5.00E-04	0.165	4.13E-08
Manganese	3.80E-04	0.165	3.14E-08
Mercury	2.60E-04	0.165	2.15E-08
Nickel	2.10E-03	0.165	1.73E-07
Selenium	2.40E-05	0.165	1.98E-09
Total			5.00E-07

lb = pound $10^6 = 1,000,000$ $ft^3 = cubic feet$ tpy = tons per year

4.2.3 Alternative 1

Implementing this alternative would have a minor, temporary impact on local air quality; however, this impact would not be significant. Potential environmental consequences would be similar to those of the proposed action.

4.3 NOISE

Noise impact analysis typically evaluates potential changes to existing noise environments that would result from implementation of a proposed action and alternatives. Potential changes in the noise environment can be (1) beneficial, if they reduce the number of sensitive receivers exposed to unacceptable noise levels; (2) negligible, if the total area exposed to unacceptable noise levels is essentially unchanged; or (3) adverse, if they result in increased exposure to unacceptable levels. Implementing the proposed action could increase the levels of noise within the immediate project areas through the temporary use of construction equipment. Potential effects will be quantified in this EA by determining if on-site noise levels would increase ambient noise conditions to unacceptable levels or would create long-term conditions that would be unacceptable within specified noise contours. Impacts would be considered significant if, over the long-term, noise levels were above the limits of the established noise contours. The ROI for this resource area was the project area and the immediately surrounding areas.

Construction noise is planned to occur for periods of 8 hours a day, Monday through Saturday. According to the OSHA, it is unacceptable for persons to be exposed to noise levels equal to a time-averaged sound level of 90 dBA or higher during an 8-hour period.

4.3.1 No Action

Selecting the no action alternative would result in no significant impact to the existing noise conditions of the project area and surrounding areas. Under this alternative, there would be no construction activities conducted, and as a result, there would be no change in the current noise environment. Noise producing activities, which are at or below acceptable levels for their designated noise contours, would remain as described in Section 3.3.

4.3.2 Proposed Action

Implementing the proposed action would result in no significant noise impacts. The primary source of short-term noise would be the equipment associated with construction activities. Heavy machinery, the major source of noise, is constantly moving in unpredictable patterns within the project area; however, operations would normally occur during daylight hours when occasional loud noises are more tolerable. It is expected that in the absence of aircraft noise, the construction noise would dominate and be clearly perceptible at all receivers within the ROI. Noise levels imposed on surrounding buildings would be dependent on the location of equipment within the project area. Under this alternative, construction noise is not expected to exceed the 90 dBA time-averaged sound level as specified by OSHA.

The project area, as indicated in Section 4.6, is located in the DNL 70 contour. Even though maximum sound pressure levels can occasionally be as high as 90 dBA at a

distance of 50 feet (and closer), the day-night average sound levels are likely to remain within the 70 dBA level.

Construction noise could result in an increased probability of annoyance and speech interference within the ROI. Outdoor receivers within close proximity of the ROI may experience a decrease in speech intelligibility. However, as discussed in Section 2.2, work-hour controls and proper maintenance of muffler systems would be in place to minimize construction noise. As a result, no significant impacts would be anticipated, and upon completion of construction activities and removal of equipment, sound levels should return to those comparable to the levels that existed prior to construction, including long-term traffic-related noise.

4.3.3 Alternative 1

Implementing this alternative would result in no significant noise impacts. Potential environmental consequences would be similar to those of the proposed action.

4.4 BIOLOGICAL RESOURCES

As mentioned previously, the USFWS and the CDOW maintain protected species lists (endangered, threatened, proposed candidate, or species of concern) for species that occur or could potentially occur within Arapahoe County. If species do occur, implementing the proposed action or alternatives could affect these species and their habitat through ground-disturbing activities and increases in impervious cover. Potential effects to biological resources for both listed and nonlisted species will be estimated in this EA based on the number of acres of habitat and/or the number of individual species affected. Impacts to biological resources would be significant if there were substantial adverse effects on protected species or their habitats or if there were any substantial adverse impacts to other sensitive habitats. The ROI for this resource was the project area, which was compared to the installation.

4.4.1 No Action

Selecting the no action alternative would result in no ground-disturbing activities and therefore no alteration/disturbance of existing vegetative cover. Due to the absence of ground-disturbing activities at the project area, vegetation and wildlife, including protected species, would not be significantly impacted.

4.4.2 Proposed Action

Implementing the proposed action would not result in significant impacts to biological resources. The proposed action in the short-term would remove less than 1.0-acre of previously disturbed, historically seeded, crested wheatgrass prairie, which is highly

prevalent in disturbed areas and is not considered a sensitive community type. Additionally, no listed species (including black-tailed prairie dogs and burrowing owls), or their habitat, have been observed on or adjacent to the project area. As mentioned previously, in accordance with BAFB policy, surveys would be conducted prior to commencement of construction activities to verify the presence/absence of either black-tailed prairie dogs or burrowing owls. Any black-tailed prairie dogs present would be removed prior to commencing construction activities using approved removal methods. If nesting burrowing owls were present, construction activities would be scheduled between November through February, when nesting owls would not be present or activities would commence once the burrowing owls have fledged and can be removed from the nests, which would ensure no long-term impacts to this species from implementing the proposed action. If black-tailed prairie dogs and/or burrowing owls were identified after commencement of construction, construction activities would be halted and the 460 CES/CEVP, Natural Resources Manager would be contacted for further instructions.

4.4.3 Alternative 1

Implementing this alternative would result in no significant impact on biological resources. Potential environmental consequences would be similar to those of the proposed action.

4.5 SOCIAL OR ECONOMIC RESOURCES (INCLUDING ENVIRONMENTAL JUSTICE)

Implementing a proposed action or alternatives could affect the local demographics, employment, and income potential, as well as localized minority and/or low-income populations. Significant impacts would occur to income and employment if an unacceptable change (i.e., significant loss or decrease) in these components occurs. There would be significant environmental justice impacts if a disproportionate amount of the adverse effects of the action were felt by minority and/or low-income populations.

4.5.1 No Action

Selecting the no action alternative would result in no significant impacts to social or economic resources, including population, income and employment, or housing, in Arapahoe County or within the USCB census tract containing BAFB. Since there would be no construction activities and current methods would continued to be employed, there would be no potential increases in employment opportunities or any reductions in the number of employment opportunities. Since there are no anticipated employment changes due to this alternative, there would be no changes in the population growth rate or demographics, no anticipated change in income potential, and no anticipated change in housing starts.

Arapahoe County would not be considered an area of concentrated minority population, nor would it be considered a poverty area. Likewise, USCB Census Tract 71.02 and Block Group 9 would not be considered areas of concentrated minority population nor would it be considered poverty areas. Since there would be no anticipated impacts to population, income and employment, and housing, there would be no anticipated disproportionate impacts to minority or low-income populations.

4.5.2 Proposed Action

Similar to the no action alternative, implementing the proposed action would result in no significant impacts to social or economic resources, including population, income and employment, and housing, within Arapahoe County or within the USCB census tract containing BAFB. Construction activities, if provided by an outside contractor, would be likely to increase short-term spending within the area immediately surrounding BAFB; however, this impact would have likely occurred elsewhere in the region, unless new employment opportunities were created or formerly unemployed workers found employment. No new employment opportunities are anticipated from the operation of the new hazardous materials/hazardous wastes pharmacy, only a relocation of employees from one location to another on base. Additionally, construction spending would be concentrated within the local area, thereby reducing the probability of a change in population growth based on this alternative. Without a change in the population growth rate, housing starts would likely remain static. The only anticipated impacts from implementing the proposed action would be the short-term spending increase for goods and services (food and beverage retailers) within the immediate vicinity of BAFB, which would subside after construction activities have concluded.

Arapahoe County would not be considered an area of concentrated minority population, nor would it be considered a poverty area. Likewise, USCB Census Tract 71.02 and Block Group 9 would not be considered areas of concentrated minority population nor would it be considered poverty areas. Since there would be no anticipated long-term impacts to population, income and employment, and housing, there would be no anticipated disproportionate impacts to minority or low-income populations.

4.5.3 Alternative 1

Implementing this alternative would result in no significant impacts on the population, income or employment, or housing characteristics of Arapahoe County or the immediate project area. Potential environmental consequences would be similar to those of the proposed action.

4.6 LAND USE AND TRANSPORTATION

Potential land use impacts are based upon an area's degree of sensitivity to land use changes. Typically, land use impacts are thought to be significant if they would: (1)

violate or otherwise be inconsistent with adopted land use plans or policies; (2) undermine the viability of a favored existing land use activity; (3) create threats to the public health, safety, and welfare of the occupants of adjacent or nearby land users; or (4) conflict with the fundamental mission of an installation. The ROI for this resource is the installation.

4.6.1 No Action

Selecting the no action alternative would not create any changes to the transportation networks in and around BAFB. Under this alternative, the existing hazardous materials/hazardous wastes storage containers would remain at their current locations, and no construction activities would occur. The inefficiencies that result from the existing arrangement of scattered storage containers and the absence of central packaging and disposal facilities prevent optimal land use patterns from fully developing; however, no significant adverse impacts would occur, and baseline conditions would remain as described in Section 3.6.

4.6.2 Proposed Action

Implementation of the proposed action would result in no significant adverse impacts to land use at BAFB; however, slight beneficial impacts can be expected. The operation of a hazardous materials issue facility and a hazardous wastes storage facility would further BAFB's mission and enhance compliance with hazardous materials and wastes collection and disposal plans. Implementation of this alternative would not conflict with the long-term planned land uses described in the BAFB General Plan since the facility would be located in an area designated as Industrial. The proposed use is consistent with this designation. Additionally, this alternative would be consistent with AICUZ planning and design guidelines. Since the project area would be located in the interior of BAFB, there would be no impacts to land uses outside BAFB boundaries.

Implementation of the proposed action would not result in significant impacts to transportation resources. The transport of workers and construction equipment to and from the project area would result in a temporary short-term increase in traffic volume on Aspen Avenue. Aspen Avenue is a 4-lane primary route, and the temporary increase in traffic is not expected to adversely impact area traffic patterns. There would be no permanent long-term changes to on- or off-base transportation patterns, capacity, or volume. However, there may be temporary negative impacts to transportation from the proposed construction of the hazardous materials issue facility and the hazardous wastes storage facility. During construction activities, there would be a slight increase of traffic on and around the base from trucks entering and leaving the project area.

4.6.3 Alternative 1

Implementing this alternative would have no significant land use or transportation impacts. Potential environmental consequences would be similar to those of the proposed action.

4.7 PUBLIC UTILITIES

Potential impacts to public utilities are based upon the level of capacity of the existing systems. Municipal systems are planned under constant growth assumptions over long periods (20 to 40 years). Unexpected rapid development within municipalities or the urban fringe can add stresses to both the community infrastructure (i.e., water and wastewater systems) and the community services (i.e., fire, police, schools). The ROI for these resource areas is the areas immediately surrounding the installation and those systems that service the installation.

4.7.1 No Action

Selecting the no action alternative would not create any changes to utilities in and around BAFB. There would be no construction of new facilities and no increase in demand for utilities, such as energy or water services. Under this alternative, the existing hazardous materials/hazardous wastes storage containers would remain at the current locations and no construction activities would occur. As a result, no significant adverse impacts would occur, and baseline conditions would remain as described in Section 3.7.

4.7.2 Proposed Action

Implementing the proposed action would not result in significant impacts to public services or utilities. The proposed action would likely result in long-term, small additional demands for utilities. However, the increased utility demand would not be substantial and should be within the existing capacity of the provider.

4.7.3 Alternative 1

Implementing this alternative would have no significant utilities impacts. Potential environmental consequences would be similar to those of the proposed action.

4.8 HAZARDOUS MATERIALS AND SUBSTANCES

Implementing a proposed action or alternatives could disturb and/or generate hazardous wastes, consume hazardous materials, and/or disturb known hazardous materials facilities listed on federal and state databases. Potential effects associated with hazardous materials will be determined by the absence/presence of listed facilities within standard

search radii and the hazardous waste management requirements associated with construction activities. The ROI for these resource areas is the installation and the immediate project area.

4.8.1 No Action

Selecting the no action alternative would result in no ground-disturbing activities and no construction activities; therefore there would be no alteration or disturbance of soils and no generation of wastes as the result of construction. However, this alternative would result in a long-term increased chance and probability of a spill occurring during transport of hazardous wastes if the current system and facilities are used with no improvements. Currently, hazardous materials and hazardous wastes are stored in four portable metal containers equipped with secondary containment at two locations on the installation. These multiple locations and distance from hazardous materials/hazardous waste sources increase the chances of spills and increased transport times.

4.8.2 Proposed Action

4.8.2.1 Hazardous Materials and Hazardous Wastes

Implementation of the proposed action would result in no significant adverse impacts from hazardous materials/hazardous wastes used or generated at BAFB. The proposed action would be strategically located and designed to provide a long-term convenient source to manage and control hazardous materials and hazardous wastes, which would improve material control through a reduction in redundant supplies, lessen the chance of spills, and provide a means for instant spill containment.

Hazardous materials utilized during construction activities would likely include fuels, paints, glues, asphalt materials, etc. Most of these materials would typically be consumed in their entirety and very little waste generated for disposal in the short-term. As a result, no significant amounts of construction-related hazardous materials would be expected, and any hazardous materials generated during the activities would be disposed of in accordance with all applicable federal, state, and local regulations.

Operational activities at these facilities would not result in significant adverse impacts from hazardous materials or hazardous wastes. As mentioned previously, during FY 02, BAFB purchased approximately 26 tons of hazardous materials and disposed of 3.5 tons of hazardous wastes. Also, during this period BAFB used approximately 926 pounds of regulated pesticides and approximately 33 tons of regulated Class I ODS. The hazardous materials issue facility and the hazardous wastes storage facility would provide a single point of control and management, accountability and tracking of the distribution and use of all hazardous materials brought on base. The hazardous materials issue facility would be used to store hazardous materials in bulk for repacking, breakout, and distribution. This activity would have the capability of compatible segregated storage for hazardous

materials in accordance with the OSHA storage standards. Also, this facility would make the hazardous materials available in the smallest units deemed reasonable. Hazardous materials would be repacked into smaller, more usable quantities for distribution or issued as a single item. This facility would also have an area designated for inspection of returned material to determine if it can be reused, recycled, or ultimately be declared waste. The hazardous wastes storage facility would facilitate proper processing of hazardous wastes to further comply with the hazardous and solid waste provisions of the RCRA. The facility would be strategically located and designed to provide a convenient location from which to manage and control hazardous materials and hazardous wastes, which would improve material control, reduce generated wastes, lessen the chance of spills, and provide a means for instant spill containment.

4.8.2.2 Asbestos

Implementation of the proposed action would not result in any significant impacts from subsurface ACM. Surveying of subsurface piping would be performed prior to construction to identify areas that could contain subsurface ACM. If any pipes were located, removal and disposal of ACM would be conducted in accordance with applicable regulations to protect human health and the environment.

4.8.3 Alternative 1

Implementing this alternative would have no significant hazardous materials impacts. Potential environmental consequences would be similar to those of the proposed action.

Implementation of this alternative would not result in any significant impacts from subsurface ACM since there were no War World II-era structures previously within the project area. The project area is on previously disturbed land with no former structures having occupied the site; therefore, asbestos is not expected to be present. If any pipes were found, removal and disposal of ACM would be conducted in accordance with applicable regulations to protect human health and the environment.

4.9 IRREVERSIBLE AND IRRETRIEVABLE RESOURCES

Implementing the proposed action or alternative to the proposed action would not result in an irreversible commitment of resources. An irreversible commitment of resources includes the permanent loss or commitment of a resource, such as the extinction of a species, the mining of ore, or the harvesting an old-growth forest. Additionally, implementing the proposed action or alternative to the proposed action would not result in an irretrievable commitment of resources, except building materials. An irretrievable commitment of resource includes the loss of resources for a period of time, such as timber harvesting.

4.10 CUMULATIVE IMPACTS

According to the CEQ (1997b) in *Considering Cumulative Effects Under the National Environmental Policy Act*, "...Only by reevaluating and modifying alternatives in light of the project cumulative effects can adverse consequences be effectively avoided or minimized." Cumulative effects should be considered in the scoping process of proposed actions to avoid long-term damage to the natural and man-made environments.

Implementing any of the alternatives considered in this EA could potentially result in cumulative impacts. Cumulative impacts can become an important issue when the chosen activity (i.e., construction of a hazardous materials issue facility and a hazardous wastes storage facility) interacts either directly or indirectly with other unrelated actions (past, present, or reasonably foreseeable). Realignment of BANGB into BAFB created immediate needs for additional built spaces, including the proposed action (see Table 1-2). As mentioned previously, BAFB currently maintains 2.2 million SF of occupiable floor space (BAFB 2002b), which, with the addition of surface parking areas, accounts for approximately 4.2 million SF of developed surface at BAFB. Planned construction/development activities would increase developed surfaces, including parking, at BAFB by approximately 54,250 SF in FY 02, 638,258 SF in FY 03, 59,040 SF in FY 04, and 131,445 SF in FY 05, for an approximate total of 883,000 SF in new construction, depending on construction scheduling, equaling a total developed area of approximately 5.1 millions SF (BAFB 2002b). If all projects were constructed according to current schedules, there would be an increase of approximately 21 percent in developed surfaces on BAFB within the next four years. A full analysis of the cumulative impacts of all construction activities is currently being undertaken by BAFB as part of implementing the General Plan, and therefore only cumulative impacts due to the construction and operation activities of the hazardous materials issue facility and a hazardous wastes storage facility are identified here. The construction of these facilities would account for 10,226 SF or approximately 1.0 percent of total planned construction activities. These construction activities would increase the amount of impervious and built surfaces within the installation; however, construction and operational BMPs would reduce or avoid any immediate adverse impacts to the natural and man-made environments at BAFB.

4.10.1 Surface Water Resources and Stormwater Quality

There would be no significant cumulative impacts to surface water resources due to implementing the proposed action or alternative. However, there would be more stormwater discharged, collected, and managed due to the increase in impermeable surfaces. Estimated average annual stormwater flows are listed in Table 4-8. Active BMPs, collection, and management of these additional surface waters should minimize any chance for increased discharge concentrations.

Table 4-8
Estimated Average Annual Stormwater Flows for BAFB

Construction Period	Estimated Impervious Surface Area (Acres)	Estimated Stormwater Flow* (10 ⁶ gallons)	Precipitation Converted to Collected Stormwater (10 ⁶ gallons)
All previous construction	142.60	1.090	0.000
FY 02	143.80	1.100	0.010
FY 03	158.50	1.220	0.130
FY 04	159.90	1.230	0.140
FY 05	162.90	1.250	0.160
Total	162.90	1.250	0.160
PA/A	1.00	0.007	0.007
Percent Accounted for by the PA/A	0.60	0.600	0.600

^{*}Assumes average annual precipitation of approximately 16 inches

PA/A = Proposed Action or Alternative

During construction phases, extra care should be taken to perform scheduled servicing of the catch basins, oil-water separators, and any other stormwater collection points. This would ensure containment of construction debris, displaced silt and fuel, oil, grease, and coolants from construction equipment. After construction completion, the subsequent collection and management of stormwater would lead to a lowered transport and discharge of many potential water contaminants, including fertilizers, pesticides, fuel, oil, grease, and coolant.

When implementation of a proposed action or alternative is combined with previous and other foreseeable activities, flooding potential could increase. Estimated peak stormwater flow rates for a 10-, 25-, 50-, and 100-year storm event with duration a of 2 and 24 hours are listed in Table 4-9. If necessary, appropriate upgrades to existing stormwater management systems would be made to handle the increased flows. Although there would be no anticipated change to the documented 100- year floodplain, the potential for localized on-base flooding during a significant precipitation event would be examined with respect to these ongoing changes. During such an event, spikes in transport of traditional surface pollutants such as particulates, oil, grease, and coolants could also be observed.

4.10.2 Air Quality

There would be no significant cumulative impacts to air quality due to the proposed action or alternatives. Cumulative impacts to air quality were considered significant if construction or operational emissions for previous, proposed, and reasonably foreseeable

 $^{10^6 = 1,000,000}$

Table 4-9
Peak Stormwater Flows for BAFB during 10-,25-, 50-, and 100-Year Storms

Storm		Peak		Peak Stormwater Flow Rates (ft ³ /s)					
Frequency (years)	Duration (Hours)	/a ~ ``	Previous	FY 02	FY 03	FY 04	FY 05	PA/A	Flow Due to PA/A
10	2	0.9	79.1	79.7	87.9	88.7	90.3	0.5	0.6
10	24	0.08	7.7	7.8	8.6	8.7	8.8	0.1	0.6
25	2	1.06	98.4	99.2	109.4	110.3	112.4	0.7	0.6
25	24	0.11	9.8	9.9	10.9	11.0	11.2	0.1	0.6
50	2	1.13	105.2	106.1	116.9	117.9	120.2	0.7	0.6
50	24	0.11	10.2	10.2	11.3	11.4	11.6	0.1	0.6
100	2	1.44	133.3	134.4	148.2	149.5	152.3	0.9	0.6
100	24	0.14	13.3	13.4	14.8	14.9	15.2	0.1	0.6

 ft^3/s = cubic feet per second

hrs = hours

in/hr = inches per hour

PA/A = Proposed Action or Alternative

construction activities would exceed the *de minimus* rate specified for attainment/maintenance areas (see Table 4-2), would be regionally significant, or would contribute to a violation of the Title V permit limitations.

4.10.2.1 Construction Activities

The PM_{10} emissions were identified as the primary pollutant from construction activities. The PM_{10} emissions anticipated during construction activities are listed in Table 4-10. These emissions levels do not constitute a significant cumulative impact. The analysis was based on approximate building square footage and surface parking.

 $\begin{array}{c} \textbf{Table 4-10} \\ \textbf{PM}_{10} \, \textbf{Emissions for Previous, Proposed and} \\ \textbf{Reasonably Foreseeable Construction Activities} \end{array}$

	All Previous Construction	FY 02	FY 03	FY 04	FY 05	Total
Baseline PM ₁₀ Emissions (tons)	NA	12.00	12.00	12.00	12.00	
PM ₁₀ Emissions due to PA/A (tons)	NA	0.00	0.00	0.00	2.20	2.20
Other Reasonably Foreseeable						
Construction PM ₁₀ Emissions (tons)	NA	4.50	52.50	4.90	10.30	
Total (tons)	513.40	16.40	64.80	16.80	22.80	634.30
Title V Permit Limits for Potential						
PM ₁₀ Emissions (tons)	NA	99.90	99.90	99.90	99.90	
Percent Emissions						
Accounted for by PA/A	0.00	0.00	0.00	0.00	9.63	0.35

NA = not applicable

PA/A = Proposed Action or Alternative

4.10.2.2 Facilities Operations

There would be minor ongoing emissions from support services after completion of construction activities. These cumulative emissions are not considered significant. Emissions are not anticipated to exceed the rates specified for attainment/maintenance areas for CO, O₃, and PM₁₀, be regionally significant, or significantly contribute to a violation of Title V permit limitations (Table 4-11). The analysis was based on approximate building square footage and surface parking.

Table 4-11
Emissions for Previous, Proposed and
Reasonably Foreseeable Heating and Cooling Activities

Construction Period	Acres	Estimated Basewide Natural Gas Usage for Heating and Cooling (10 ⁶ ft ³)	CO (tpy)	NO _x (tpy)	PM ₁₀ (tpy)	SO _x (tpy)
All previous construction	142.600	199.800				
FY 02	143.800	201.600	8.3000	10.1000	0.8000	0.10000
FY 03	158.500	222.200	9.2000	11.1000	0.8000	0.10000
FY 04	159.900	224.100	9.2000	11.2000	0.9000	0.10000
FY 05	162.900	228.300	9.4000	11.4000	0.9000	0.10000
Total	162.900	1075.900	36.1000	43.7000	3.3000	0.30000
PA/A	1.000	0.165	0.0033	0.0077	0.0006	0.00005
PA/A as a Percentage of 5 Year Cumulative		0.014		0.0100	0.0100	0.01000
Emissions	0.921	0.014	0.0090	0.0180	0.0180	0.01900

10⁶ = 1,000,000ft³ = cubic feettpy = tons per year

PA/A = Proposed Action or Alternative

4.10.3 Noise

Construction activities associated with a proposed action or alternative would increase the short-term noise levels of the adjacent areas; however, once construction equipment is removed, noise should return to pre-construction levels, which were at or below acceptable limits within the designated noise contours. Operational activities would not contribute to additional long-term noise levels since there would not be any new mobile sources of noise, nor would the activities create additional noise.

4.10.4 Biological Resources

Construction and operational activities associated with the proposed action or alternatives would remove approximately 1.5 acres of currently disturbed, undeveloped vegetation, which is less than 1.0 percent of the total undeveloped surface on BAFB. There are currently no protected species or species of local concern (i.e., black-tailed prairie dogs or

burrowing owls) located within the project areas and therefore development associated with the proposed action or alternative would not, in the short-term, cumulatively impact these populations on BAFB. Protected species and species of local concern would be managed under the guidance of the Prairie Dog Management Plan for BAFB and the Wildlife Management Plan for BAFB to ensure that future development would not cumulatively impact these populations on BAFB.

4.10.5 Social or Economic Resources (Including Environmental Justice)

There would be no cumulative social or economic impacts due to the proposed action or alternatives since there would not be an increase or decrease in total employment at BAFB.

4.10.6 Land Use and Transportation

Under the proposed action or alternatives, all activities would occur within the appropriate land use area, thereby not creating cumulative impacts to land use on BAFB. Since these activities would be located within the interior of the installation, there should be no adverse short-term impacts to current or planned land use activities on non-military lands surrounding BAFB. The General Plan was developed in coordination with surrounding communities to lessen future impacts that developments at BAFB could potential create. Future developments on BAFB would occur within the appropriate land use category as described in the General Plan, which would coincide with planned land uses of adjacent non-military lands and avoid cumulative impacts to land use and transportation.

4.10.7 Public Utilities

Since implementing either the proposed action or alternatives would use existing public utilities, there would be a slight increase in demand for these services. However, due to the small demand these activities would require, there would be no short-term adverse changes in the level of service (Table 4-12). Future development at BAFB could cumulatively increase utility demand by approximately 40 percent over the current usage based on the estimated square footage built per year.

4.10.8 Hazardous Materials and Substances

Following all federal, state, and local laws and regulations, all new materials used for construction would not contain ACM and if any ACMs were found during the construction of the facilities it would be disposed of following all applicable regulations,

Table 4-12 Estimated Increase in Utility Demand

Estimated increase in County Demand									
Parameter	Current	FY 02	FY 03	FY 04	FY 05	PA/A			
SF	2,200,000	54,250	638,258	59,040	131,445	5,382			
Electricity (kwh/m ¹)	8,862,732	218,547	2,571,232	237,843	529,528	21,681			
Gas (ft^3/m^2)	156,412	3,857	45,378	4,198	9,345	383			
Water (mgm ³)	5.95	0.15	1.72	0.16	0.36	0.01			
Cumulative Percent I	2	31	34	40	0.20				
Utility Demai	nd								

PA/A = Proposed Action or Alternative

kwh/m = kilowatt hour per month

 $ft^3/m = cubic feet per month$

mgm = million gallons per month

- Average electricity usage per square foot = 4.03 kilowatt hour based on FY 02 utility usage at BAFB
- ² Average gas usage per square foot = 0.07 cubic feet based on FY 02 utility usage at BAFB

thereby ensuring no cumulative impacts. All hazardous materials and hazardous wastes used or generated during the proposed action or alternatives would be used and disposed of according to all applicable regulations, thereby ensuring no cumulative impacts.

4.10.9 Groundwater Resources

Since there would be no impacts to groundwater resources from implementing the proposed action or alternative, there would be no cumulative impacts from this action.

4.10.10 Wetlands

Since there would be no impacts to wetlands from implementing the proposed action or alternative, there would be no cumulative impacts from this action.

4.10.11 Floodplains

Since there would be no impacts to floodplains from implementing the proposed action or alternative, there would be no cumulative impacts from this action.

4.10.12 Soils

Since there would be no impacts to soils from implementing the proposed action or alternative, there would be no cumulative impacts from this action.

Average water usage per square foot = 9.01E-08 million gallons per day based on FY 02 utility usage at BAFB

4.10.13 Historic or Archeological Resources

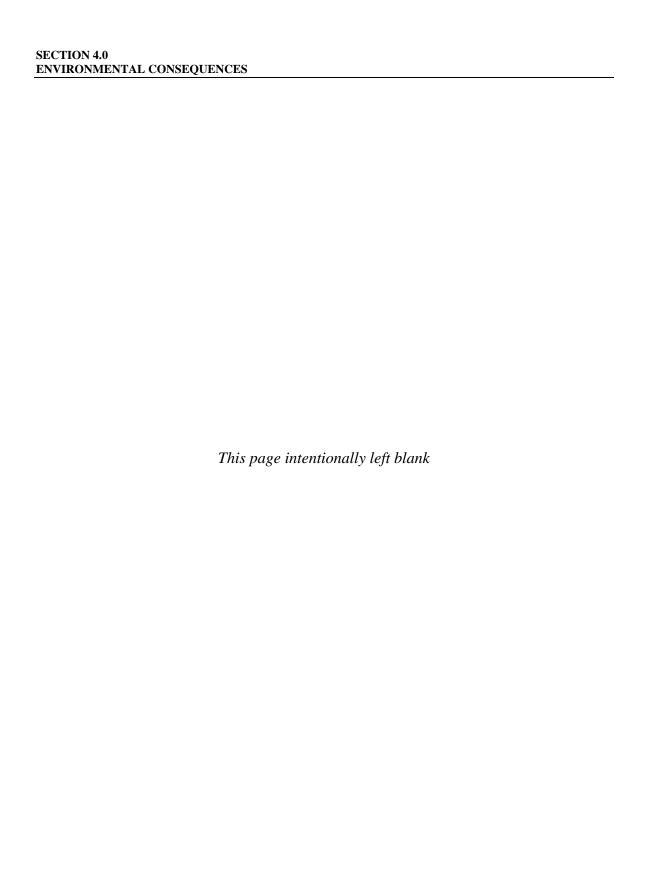
Since there would be no impacts to historic or archeological resources from implementing the proposed action or alternative, there would be no cumulative impacts from this action.

4.10.14 Environmental Restoration Program

Since there would be no impacts to the ERP from implementing the proposed action or alternative, there would be no cumulative impacts from this action.

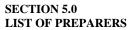
4.10.15 Radon

Since there would be no impacts from radon due implementing the proposed action or alternative, there would be no cumulative impacts from this action.



SECTION 5.0 LIST OF PREPARERS

Name/Title	Expertise/Experience	Involvement
Dana Banwart, Geo-Marine, Inc. Air Quality Analyst	Environmental Science 3 years	Air Quality
Chris Clark, Geo-Marine, Inc. NEPA Specialist	NEPA Studies 4 years	Transportation and Public Services and Infrastructure
Donna DeYoung, Geo-Marine, Inc. Hazardous Materials Specialist	Hazardous Materials 3 years	Hazardous Materials
Melissa Green, Geo-Marine, Inc. Principal Investigator	Anthropology 20 years	Cultural Resources
Kurt Hellauer, Geo-Marine, Inc. Airspace and Land Use Analyst	Land Use 13 years	Land Use
John Keiffer, Geo-Marine, Inc. Noise Analyst	Acoustics 2 years	Noise
Tim Lavallee, LPES, Inc. Air Quality Specialist	Air Quality 4 years	Air Quality
Ron Moore, Geo-Marine, Inc. NEPA Program Manager	NEPA Studies 10 years	NEPA Review
David Pitts, Geo-Marine, Inc. Biologist	Biology 10 years	Hydrologic Resources Biological Resources
Rae Lynn Schneider, Geo-Marine, Inc. NEPA Project Manager/Economist	NEPA Studies Economic Analysis 4 years	Project Management Purpose and Need Alternatives Social or Economic Resources



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SECTION 6.0 DISTRIBUTION LIST AND AGENCIES AND INDIVIDUALS CONTACTED

6.1 DISTRIBUTION OF THE DRAFT ENVIRONMENTAL ASSESSMENT

As part of CEQ regulations (§1503.1), public comments on the Draft EA were invited. This process helps decision makers and the public to understand and have input on the environmental effects of federal actions. This EA was distributed to the following local libraries and federal agencies for public review and comment period (29 March to 29 April 2004).

Aurora Central Library 14949 East Alameda Parkway Aurora, Colorado 80012

Bruce Rosenlund U.S. Fish and Wildlife Service 755 Parfet, Room 496 Lakewood, Colorado 80215

Cynthia Cody, NEPA Unit Chief U.S. Environmental Protection Agency 999 18th Street, Suite 500 Denver, Colorado 80202

David Rathke U.S. Environmental Protection Agency 999 18th Street, Suite 500 Denver, Colorado 80202

Jim Ives, CEP Environmental Planning City of Aurora 15151 East Alameda Parkway Aurora, Colorado 80012

Ed LaRock Colorado Department of Public Health and Environment 4300 Cherry Creek Drive, South Denver, Colorado 80246-1530 Denver Public Library, Government Documents Section 10 West 14th Avenue Denver, Colorado 80204

Eliza Moore, Wildlife Manager Colorado Division of Wildlife 6060 South Broadway Denver, Colorado 80216

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Eugene Jansak, Industrial Waste Specialist Metro Wastewater Reclamation District 6450 York Street Denver, Colorado 80299-3035

Brad Beckman, Manager Environmental Planning Colorado Department of Transportation 4201 East Arkansas Avenue Denver, Colorado 80222 Georgianna Contiguglia, State Historic Preservation Officer Colorado History Museum 1300 Broadway Denver, Colorado 80203-2137

6.2 COMMENTS AND RESPONSES TO COMMENTS

As part of the public and agency comment period BAFB received two agency comment letters from the City of Aurora, and the CDPHE. The comments and BAFB's responses to these comments are detailed in the following table. All agency letters and response letters can be found in Appendix D.

Table 6-1 Agency Comments and BAFB Responses to Comments

	Agency Comments and BAFB Responses to Comments							
Comment Number	Agency Comment	BAFB Response						
	Colorado Department of Public Health and Environment (02 April 2004)							
1	General – The AF ERP Program is conducting a basewide preliminary assessment which may identify other environmental concerns no previously identified at the base, potentially in areas proposed for construction	Section 3.8.2.2 of the EA has been modified to clearly identify incomplete of unavailable information per 40 CFR 1502.22. The EA now states that the conclusions from ongoing ERP assessments are not currently known; however, if ongoing ERP assessments reveal concerns within the areas proposed for construction they will be addressed on a case-by-case basis.						
2	Any asbestos encountered will need to be reported to the CDPHE for proper abatement planning.	We concur with your comment that any asbestos encountered would need to be reported to CDPHE for proper abatement planning, which would be considered "following all applicable regulations" as stated in Section 4.10.8 of the EA. Please note that the Environmental Assessment is a procedural decision-making document versus a compliance document, where the Federal Agency takes environmental concerns into consideration when making a decision regarding a proposed action (e.g., construct a building). The EA is also used as a screening document to determine whether an Environmental Impact Statement (EIS) would be required for the proposed action. In addition, we forwarded your comments to the Restoration Chief, Compliance Chief, and Toxics Program Manager who are aware of the existing regulations.						

Comment		
Number	Agency Comment	BAFB Response
	Colorado Department of Public Health and	Environment (cont'd))
3	The operation of the facility will be subject to RCRA regulations and inspections.	We concur with your comment that the operation of the facility would be subject to RCRA regulations and inspections, which would be considered "following all applicable regulations" as stated in Section 4.10.8 of the EA.
	City of Aurora, Colorado (19 A	pril 2004)
4	The proposed project involves the construction of a new 3,767 square foot facility for hazardous materials and a 1,615 square foot hazardous wastes storage facility. The purpose of the two facilities is to consolidate and centralize the issuance of hazardous materials that are used and storage of hazardous wastes generated on base. The City staff concurs with the assessment that there will be minimal impacts resulting from the construction and operation of the proposed facility. However, a question has arisen regarding the relationship of the proposed hazardous materials issue and hazardous wastes storage facility to the Hazardous Materials Gate. The recent Construction II EA identified the location of a Munitions and Hazardous Materials Gate on the eastern portion of the base, but the proposed facility is located in the southwestern part of the base. Such a location appears to increase the distance traveled by hazardous materials vehicles. This appears to contradict the statements regarding the advantages of the facility location near the Mississippi Gate.	Hazardous materials are currently transported on to the base using the Mississippi Gate, which is near a residential area. The proposed east gate is along State Highway 30, which is a hazardous cargo route. Therefore, it was considered the best overall route even though the on-base transportation routes have increased.
5	Page 3-4, Line 9 – Suggest deleting the phrase "to attainment, for a probationary period." The last clause of the sentence would read better as follows: "due to demonstrating monitored compliance with NAAQS".	Change incorporated in EA text.
6	Page 3-5 – Suggest deleting Table 3-2 since it is not applicable to the Denver-Aurora metropolitan area.	Since Denver AQCR is in the Early Action Compact (EAC), non-attainment is deferred. Therefore, Table 3-2 will be deleted.

Comment Number	Agency Comment	BAFB Response
	City of Aurora, Colorado (o	cont'd)
7	Page 3-5, lines 2 thru 5 – Suggest rephrasing statement since the current wording is confusing.	The sentence was changed to read "De minimis emissions are total direct and indirect emissions of a criteria pollutant that area caused by federal action in a nonattainment or attainment/maintenance area that are less than these threshold rates.
8	Page 3-5, lines 5&6 – Suggest deleting entire sentence. It is hard to imagine a scenario where emissions would be de minimis, yet considered regionally significant.	Change incorporated in EA text.
9	Page 3-22 – Suggest deleting Figure 3-4, since it adds nothing to the document.	Change incorporated in EA text.
10	Page 3-27, line 5 – Suggest deleting the phrase "by thermal fluids".	The sentence was modified to read – "The spilled fuel was pumped out by a contractor (Thermal Fluids) and the case is considered closed."
11	Page 4-3 – Suggest deleting Table 4-2 since it repeats information contained in Table 3-3.	Change incorporated in EA text.
12	Page 4-4, Line 24 thru 26 – Fugitive dust emissions are not "stationary" emission sources, but rather are classified by EPA as "area" sources.	The sentence was modified by deleting "stationary."
13	Page 4-7, line 5 – The furnace to be used for heating the building is likely to be at least 0.25 MMBTU/hour, not 0.25 MMBTU/year.	Typographical error. Change incorporated in EA text.
14	Page 4-7 and 4-8 – The entire section on HAP emissions can be summarized in once sentence as follows: "HAP emissions from the combustion of natural gas in the building heating system are insignificant due to the small quantity of gas combusted." The rest of the section can be deleted.	No changes made. Hazardous Air Pollutants, to include asbestos, are included in our Environmental Assessments per previous request from the Colorado Department of Public Health and Environment.

SECTION 6.0 DISTRIBUTION LIST AND AGENCIES AND INDIVIDUALS CONTACTED

Comment Number	Agency Comment	BAFB Response
	City of Aurora, Colorado (c	cont'd)
15	Page 4-7, bottom of page – The proposed MACT standard will apply to boilers and process heaters. It is unlikely that comfort space heaters/furnaces would be subject to MACT requirements.	

SECTION 7.0 REFERENCES

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SECTION 8.0 ACRONYMS AND ABBREVIATIONS

μg/m3 micrograms per cubic meter

ABW Air Base Wing

ACM asbestos-containing material

AICUZ Air Installation Compatible Use Zone

a.m. ante meridian

APCD Air Pollution Control Division AQCR Air Quality Control Region BAFB Buckley Air Force Base

BANGB Buckley Air National Guard Base BEA Bureau of Economic Analysis BMP best management practice

CAA Clean Air Act

CAOCC Colorado Air Quality Control Commission

CAS central accumulation site
CDOW Colorado Division of Wildlife

CDPHE Colorado Department of Public Health and the Environment

CEQ Council on Environmental Quality

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CES Civil Engineering Squadron
CEV Environmental Management
CFR Code of Federal Regulations
CMU concrete masonry unit

CO carbon monoxide

COANG Colorado Air National Guard

CWA Clean Water Act

dB decibel

dBA A-weighted decibel level
DNL day-night average sound level
EA environmental assessment

EDR Environmental Data Resources, Inc. EIS environmental impact statement

EO Executive Order

EPCRA Emergency Planning and Community Right-to-Know Act

ERP environmental restoration program

ESA Endangered Species Act

FEMA Federal Emergency Management Agency FICON Federal Interagency Committee on Noise

FIRE finance, insurance, and real estate FONSI finding of no significant impact FWPCA Federal Water Pollution Control Act

FY fiscal year

SECTION 8.0 ACRONYMS/ABBREVIATIONS

g/m²s grams per square meter per second

HAP hazardous air pollutants

HVAC heating, ventilation, and air conditioning

LBP lead-based paint

MACT maximum available control technology

MMBTU million British thermal units

NAAQS National Ambient Air Quality Standards NEPA National Environmental Policy Act

NESHAP National Emissions Standards for Hazardous Air Pollutants

NO_X nitrous oxides NOI notice of intent

NPDES National Pollutant Discharge Elimination System

 O_3 ozone

ODS ozone-depleting substance

OSHA Occupational Safety and Health Administration

Pb lead

PCB polychlorinated biphenyl pCi/l pico-Curies per liter

PL Public Law p.m. post meridian

PM₁₀ particulate matter measuring less than 10 microns in diameter

POL petroleum, oil, and lubricants

RCRA Resource Conservation and Recovery Act

RCRIS Resource Conservation and Recovery Information System

ROI region of influence

RTD Regional Transport District

SARA Superfund Amendments and Reauthorization Act

SBIRS space-based infrared surveillance

SEL sound exposure level

SF square feet

SIP State Implementation Plan

SO₂ sulfur dioxide

SQG small quantity generator

SWPPP Stormwater Pollution Prevention Plan

TSCA Toxic Substances Control Act
TSP total suspended particulate
USACE U.S. Army Corps of Engineers

USAF U.S. Air Force USC U.S. Code

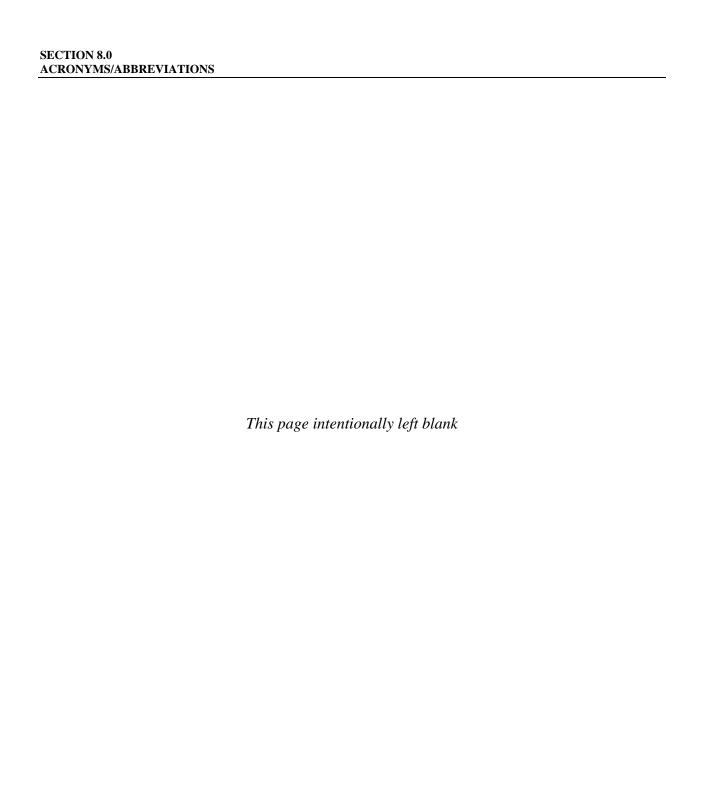
USCB U.S. Census Bureau

USDA U.S. Department of Agriculture

USEPA U.S. Environmental Protection Agency

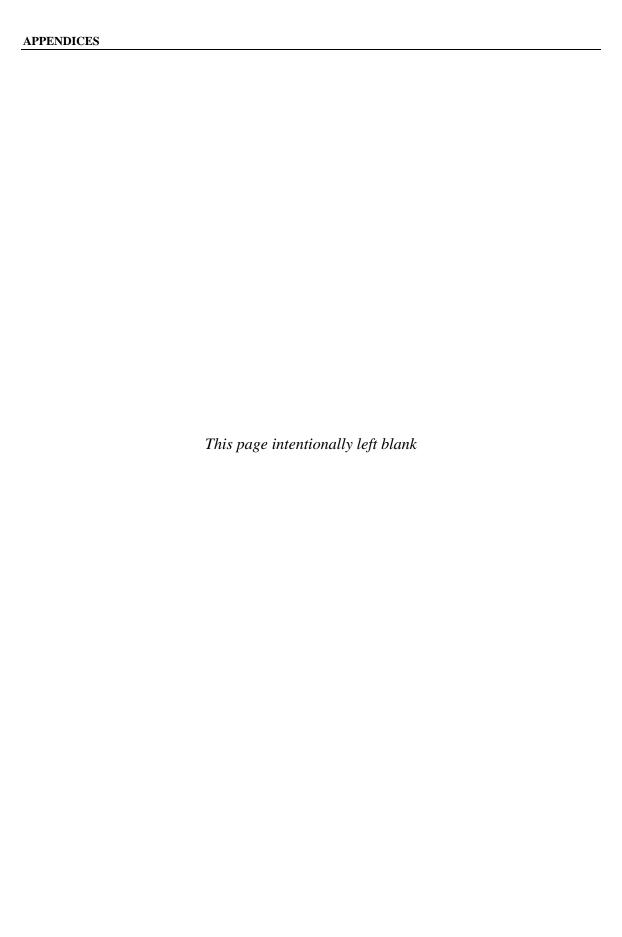
USFWS U.S. Fish and Wildlife Service UST underground storage tank

VOC volatile organic compound



APPENDIX A

USAF FORM 813



REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

0 5.049Y Report Control Symbol CRWU021055

INSTRUCTIONS: Section Lto be completed by Presents Sections II a

Sepai	rate Sheets as necessary. Reference approp	oponent, Sections II and II to be completed by Environmental Planning Fu- iriate item number(s).	nction.	Contin	ue on	
SECT	ION I - PROPONENT INFORMATION		Ti			
	1. TO (Environmental Planning Function) 2. FROM (Proponent organization and functional address symbol) 460 CES/CEC			2a. TELEPHONE NO. 7-6819		
	E OF PROPOSED ACTION MART PHARMACY					
4. PUR Provi	POSE AND NEED FOR ACTION (Identify decision ide a facility for washing privately over ent from car washing operations are	when to be made and need date). The state of	uired to	o ens	ure th	nat o
5. DES		NATIVES (DOPPA) (Provide sufficient details for evaluation of the total action.				
6. PRO	PONENT APPROVAL (Name and Grade)	8a. SIGNATURE	6b. l	DATE		_
Char	les G, Nicely, GS-11	cominney	2	6 Ju	n 20	502
SECTIO	ONII - PRELIMINARY ENVIRONMENTAL SURVEY tive effects.) (+ = positive effect; 0 = no effect; - = a	f. (Check appropriate box and describe potential environmental effects including idverse effect; U = Unknown effect.		0		U
7. AIR	INSTALLATION COMPATIBLE USE ZONE/LAND	USE (Noise, accident potential, encroachment, etc.)		x		
s. AIR	AIR QUALITY (emissions, attainment status, state implementation plan, etc.) Fugitive dust from construction.				X	
WATER RESOURCES (Quality, quantity, source, etc.) Potential Stormwater impact					X	
10. SAF	ETY AND OCCUPATIONAL HEALTH (Asbesios/r	adiation/chemical exposure, explosives safety quantity-distance, etc.)		×		
11. HAZ	ARDOUS MATERIALS/WASTE (Use/storage/gen	eration, solid waste, etc.))		×		
12. BIO	LOGICAL RESOURCES (Wetlands/floodplains, flo	ra, fauna, etc) Prairie Dog/Burrowing Owl habitat			x	
13.CUL	TURAL RESOURCES (Native American burial site.	s, archeological, historical, etc.)		×		
14.GEO	LOGY AND SOILS (Topography, minerals, geother	rmal, installation Restoration Program, seismicity, etc.)		X		
15.SOC	IOECONOMIC (Employment/population projection:	s, school and local fiscal impacts, etc.)		X		
16.OTH	ER (Potential impacts not addressed above.)			X		
SECTIO	N III - ENVIRONMENTAL ANALSIS DETERMINA	TION				
17.		TEGORICAL EXCLUSION (CATEX #) _See remarks; OR DR A CATEX; FURTHER ENVIRONMENTAL ANALSIS IS REQUIRED. See Remark	CS.			
18. REM	MARKS					
	IRONMENTAL PLANNING FUNCTION CERTIFIC	ATION 19a. SIGNATURE	19b, 1	DATE		
Elise	L. Sherva, GS-12	The Share	10	1271	102	

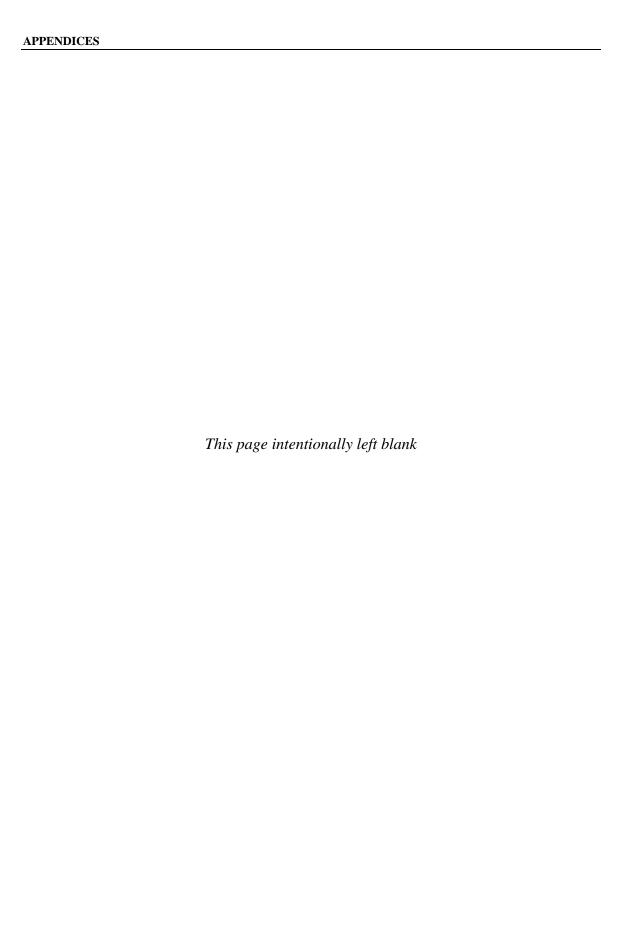
AF FORM 813 - CONTINUATION

PROPOSED ACTION: Construct an approximately 5,447 square foot Hazmart Pharmacy. This facility will provide for storing and dispensing hazardous materials and temporary storage and staging of hazardous wastes pending transport.

NO ACTION ALTERNATIVE: Hazardous materials and hazardous waste will continue to be stored in decentralized portable buildings that are incompliant with current codes. This practice is inconvenient and not cost effective. It also increases spill risks and could lead to issuance of a notice of violation and monetary fines.

APPENDIX B

NOTICE OF AVAILABILITY AND AFFIDAVIT OF PUBLICATION



THE Denver Newspaper Agency DENVER, CO

PUBLISHER'S AFFIDAVIT

City and County of Denver, STATE OF COLORADO,

Diane Trujillo

being of	ilawful
age and being first duly sworn upon oath, deposes and says:	
Legal Advertising Review	rer
That he/she is the	publishe er and ring
legal notices and advertisements within the Meaning of an Act General Assembly of the State of Colorado, Approved April 7, 1921, as amended and approved March 30, 19 And as amended and approved March 5, 1935, entitled "An Act Concerning Legal Notices, Advertisements and Publications an Fees of printers and publishers thereof, and to repeal all acts a Of acts in conflict with the provision of this Act" and amendme Thereto:	23; d the nd parts
That the notice, of which the annexed is a true copy, was publi The said newspaper to wit: (dates of publication) Mayll DE, 2004	shed in
Diane Justillo	
Subscribed and sworn to before me this 🔏day	
or warmi	
OfMARCH	
My commission expires S.71.5.7.06	
SAN SUOTA STATE OF COLORES	

Notice of Availability

Interested parties are hereby notified that Buckley Air Force Base (BAFB) has prepared a Draff Environmental Assessment (EA) and a Draff Finding of No Sjonificant Impact (FONSI) for the proposed construction and operation of a hazardous materials issue facility and a hazardous wastes storage facility at BAFB, Colorado.

Statutory Authority. This notice is being issued to interested parties in accordance with the National Environmental Policy Act (Public Law (PL) 91-190, 42 United States Code 4321 et seq.) as amended in 1975 by PL 94-52 and PL 94-83.

ronmental Policy Act (Public Law 1975 by PL 94-52 and PL 94-83.

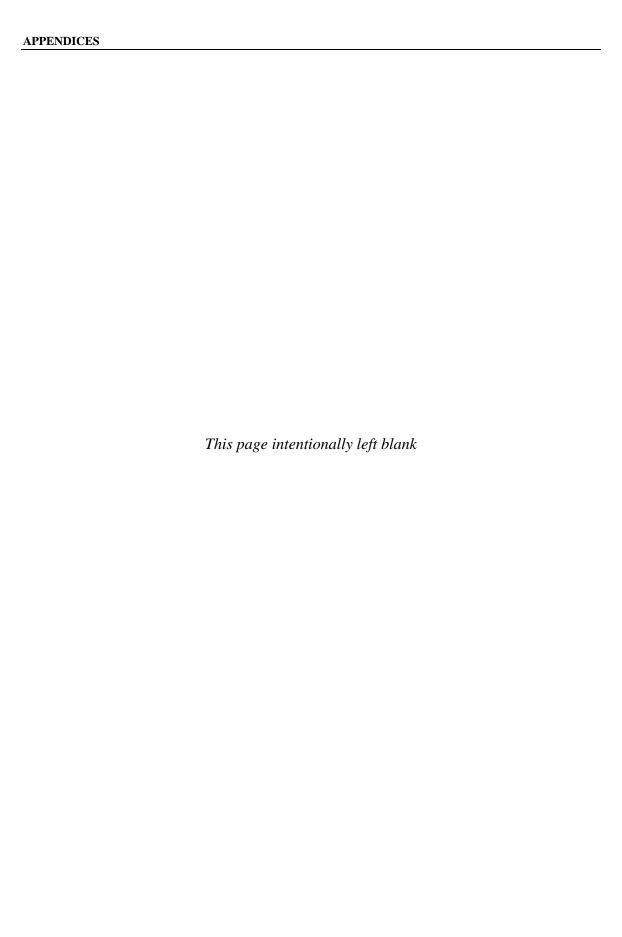
Purpose. The purpose for the proposed action is to consolidate and centralize the majority of hazardous materials used and hazardous wastes generated at BAFB to facilitate understand the state of the proposed action tracking, and disposal. The need for the located action is to have adequately designed, and confloyed facilities for the proper storage, packaging of hazardous wastes to further comply with more state of the proposed action waster of the proposed action would be strategically located in a compatible industrial and the Environment (CDPHE). The proposed action would be strategically located in a compatible industrial waster of the color and proposed action would be strategically located in a compatible industrial proposed action would be strategically located in a compatible industrial proposed action would be strategically located in a compatible industrial proposed action would be strategically located in a compatible industrial proposed action would be strategically located in a compatible industrial proposed action would be strategically located in a compatible industrial proposed action would be strategically located in a compatible industrial proposed action would be strategically located in a compatible industrial proposed action would be strategically located in the strategic of the proposed action would be strategically location. The construction of strategic and provare and action and strategic and action would be strategic and provare and action and strategic and provare and the proposed action control in the proposed action for the proposed action of the proposed a

Cemrents: Comments on the Draft EA should be directed to Elise Sherva, 460 CES/CEVP, 660 S. Absenstreet (Mail Stop 86), Bldg. 1005, Room 254, Buckley AFB, Colorado 80011-9551. The comment period is open for 30 days from 29 March 2004 following the publication of this notice in a general circulation newspaper. Copies of the Draft EA are available for review by the public at the Aurora Central Library, 1449 EA Alameda Drive, Aurora, Colorado 80012 and the Draft EA are available for review of the Comment Section, 10 West 14th Avenue, Denver, Colorado, 80204. Copies may also be obtained by writing to BAFB at the address listed above.

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APPENDIX C

INTERAGENCY COORDINATION LETTERS



www.geo-marine.com

Transmittal

To:	U.S. Fish and Wildlife Service	From:	Rae Lynn Schneider
		Date:	30 March 2004
	755 Parfet, Room 496 Lakewood, Colorado 80215	Project:	Hazardous Materials Issue Facility and Hazardous Wastes Storage Facility EA
ATTN:	Bruce Rosenlund	Location:	Buckley Air Force Base, Colorado

Enclosed please find the following:

No.	Description
1	Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Waste Storage Facility at Buckley
	Air Force Base, Colorado

Comments	ì
----------	---

Please	respond	with	your	comments	30	days	from	the	date	of	this t	ransmittal	. Send	comments
to:														

Elise Sherva 460 CES/CEV

660 South Aspen Street, Stop 86

Bldg. 1005, Room 254

Buckley Air Force Base, Colorado 80011-9551

(720) 847-9077

elise.sherva@buckley.af.mil

Copies to:	Encl. Geø-Marine, Inc.
	Rae Lynn Schneider

www.geo-marine.com

Transmittal

То:	Colorado History Museum	From:	Rae Lynn Schneider
		Date:	30 March 2004
	1300 Broadway Denver, Colorado 80203-2137	Project:	Hazardous Materials Issue Facility and Hazardous Wastes Storage Facility EA
ATTN:	Georgianna Contiguglia, State Historic Preservation Officer	Location:	Buckley Air Force Base, Colorado

No.	Description
1	Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Waste Storage Facility at Buckley Air Force Base, Colorado

Comments:	
Please respond with your comments 30 days from the date of this transmittal.	Send comments
to:	
Elise Sherva	
460 CES/CEV	
660 South Aspen Street, Stop 86	
Bldg. 1005, Room 254	
Buckley Air Force Base, Colorado 80011-9551	
(720) 847-9077	
elise sherva@hucklev af mil	

Copies to:	Encl.	Geo-Marine, Inc.
		Kin / 1
		Rae Lynn Schneider
		V

Transmittal

	Colorado Department of		Dan Lynn Cabraidau
To:	Transportation	From:	Rae Lynn Schneider
		Date:	30 March 2004
			Hazardous Materials Issue
	4201 East Arkansas Avenue		Facility and Hazardous Wastes
	Denver, Colorado 80222	Project:	Storage Facility EA
	Brad Beckman, Manager,		Buckley Air Force Base,
ATTN:	Environmental Planning	Location:	Colorado

No.	Description
1	Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Waste Storage Facility at Buckley Air Force Base, Colorado

Comments:	
Please respond with your comments 30 days from the date of this transmittal.	Send comments
to:	
Elise Sherva	
460 CES/CEV	
660 South Aspen Street, Stop 86	
Bldg. 1005, Room 254	
Buckley Air Force Base, Colorado 80011-9551	
(720) 847-9077	
elise.sherva@buckley.af.mil	

Copies to:	Encl. Geo-Marine Inc.
	1 May 1
	Rae Lynn Schneider

www.geo-marine.com

Transmittal

	Colorado Department of Public Health		
To:	and Environment	From:	Rae Lynn Schneider
		Date:	30 March 2004
			Hazardous Materials Issue
	4300 Cherry Creek Drive, South		Facility and Hazardous Wastes
 	Denver, Colorado 80246-1530	Project:	Storage Facility EA
		÷	Buckley Air Force Base,
ATTN:	Ed LaRock	Location:	Colorado
Englose	ad places find the following:		
No.	ed please find the following: Description		
1	Draft Environmental Assessment for t	•	•
	Hazardous Materials Issue Facility and Air Force Base, Colorado	a Hazardous	vvaste Storage Facility at Buckley
<u> </u>	All 1 orce base, colorado		
Comme	ents:		
Please r	espond with your comments 30 days fro	m the date of	this transmittal. Send comments
to:			
	Elise Sherva		
	460 CES/CEV 660 South Aspen Street, Stop 86		
	Bldg. 1005, Room 254		
	Buckley Air Force Base, Colorado 8	0011-9551	
	(720) 847-9077		
	elise.sherva@buckley.af.mil	.c.	
Copies	to: Enc	l. Geo-Ma	rine Inc.
•		1 au	
		Rae Lynfr	Schneider

www.geo-marine.com

Transmittal

	Metro Wastewater Reclamation		
То:	District	From:	Rae Lynn Schneider
		Date:	30 March 2004
			Hazardous Materials Issue
	6450 York Street		Facility and Hazardous Wastes
	Denver, Colorado 80299-3035	Project:	Storage Facility EA
	Eugene Jansak, Industrial Waste		Buckley Air Force Base,
ATTN:	Specialist	Location:	Colorado
Enclose	ed please find the following:		
No.	Description		
1	Draft Environmental Assessment for Hazardous Materials Issue Facility and		
	Air Force Base, Colorado		
Comme	ents:		
Please r	espond with your comments 30 days fr	om the date of	this transmittal. Send comments
to:	-11	*	
	Elise Sherva 460 CES/CEV		
	660 South Aspen Street, Stop 86		
	Bldg. 1005, Room 254		
	Buckley Air Force Base, Colorado 8	30011-9551	
	(720) 847-9077		
	elise.sherva@buckley.af.mil		
Copies	to: End	cl. Geø-Ma	rine Inc.
		Rae Lynr	Schneider

Transmittal

То:	City of Aurora	From:	Rae Lynn Schneider
		Date:	30 March 2004
	15151 East Alameda Parkway Aurora, Colorado 80012	Project:	Hazardous Materials Issue Facility and Hazardous Wastes Storage Facility EA
ATTN:	Jim Ives, Environmental Planning	Location:	Buckley Air Force Base, Colorado

Enclosed please find the following:

No.	Description
1	Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Waste Storage Facility at Buckley Air Force Base, Colorado

Comme	nts:			

elise.sherva@buckley.af.mil

Please respond with your comments 30 days from the date of this transmittal. Send comments to:

Elise Sherva
460 CES/CEV
660 South Aspen Street, Stop 86
Bldg. 1005, Room 254
Buckley Air Force Base, Colorado 80011-9551
(720) 847-9077

Copies to:	Encl. Geo-Marine Line.
	1 Multh
	Rae Lynn/Schrieider

Transmittal

GEO-MARINE INCORPORATED

To:	City of Aurora	From:	Rae Lynn Schneider
		Date:	30 March 2004
	15151 East Alameda Parkway Aurora, Colorado 80012	Project:	Hazardous Materials Issue Facility and Hazardous Wastes Storage Facility EA
ATTN:	Denise Balkas, Director of Planning	Location:	Buckley Air Force Base, Colorado

No.	Description
1	Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Waste Storage Facility at Buckley Air Force Base, Colorado

Comments:	
Please respond with your comments 30 days from the date of this transmittal.	Send comments
to:	
Elise Sherva	
460 CES/CEV	
660 South Aspen Street, Stop 86	
Bldg. 1005, Room 254	
Buckley Air Force Base, Colorado 80011-9551	
(720) 847-9077	
elise.sherva@bucklev.af.mil	

Copies to:	Encl.	Geo-Marine Inc.
		Shiff I
		Rae Lynn Schneider

Transmittal

Date:	30 March 2004
Project:	Hazardous Materials Issue Facility and Hazardous Wastes Storage Facility EA
Location:	Buckley Air Force Base, Colorado
P	Project:

No.	Description
1	Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Waste Storage Facility at Buckley
	Air Force Base, Colorado

Comments:	
Please respond with your comments 30 days from the date of this transmittal.	Send comments
to:	
Elise Sherva	
460 CES/CEV	
660 South Aspen Street, Stop 86	
Bldg. 1005, Room 254	
Buckley Air Force Base, Colorado 80011-9551	
(720) 847-9077	
elise.sherva@buckley.af.mil	

Copies to:	Encl.	Geo-Marine, Inc.
		Mu My
		Rae Lynn Schneider

www.geo-marine.com

Transmittal

To:	U.S. Environmental Protection Agency	From:	Rae Lynn Schneider
		Date:	30 March 2004
			Hazardous Materials Issue
	999 18 th Street, Suite 500		Facility and Hazardous Wastes
	Denver, Colorado 80202	Project:	Storage Facility EA
			Buckley Air Force Base,
ATTN:	David Rathke	Location:	Colorado

No.	Description
1	Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Waste Storage Facility at Buckley Air Force Base, Colorado

Comments:	
Please respond with your comments 30 days from the date of this transmittal.	Send comments
to:	
Elise Sherva	
460 CES/CEV	
660 South Aspen Street, Stop 86	
Bldg. 1005, Room 254	
Buckley Air Force Base, Colorado 80011-9551	
(720) 847-9077	
elise.sherva@buckley.af.mil	

Copies to:	Encl.	Geo-Marine, Inc.	
<u> </u>		Man May	
		Rae Lynn/Schreider	

www.geo-marine.com

Transmittal

To:	U.S. Environmental Protection Agency	From:	Rae Lynn Schneider
		Date:	30 March 2004
	999 18 th Street, Suite 500 Denver, Colorado 80202	Project:	Hazardous Materials Issue Facility and Hazardous Wastes Storage Facility EA
ATTN:	Cynthia Cody, NEPA Unit Chief	Location:	Buckley Air Force Base, Colorado

No.	Description
1	Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Waste Storage Facility at Buckley
	Air Force Base, Colorado

Please respond with your comments 30 days from the date of this transmittal.	Send comments
0:	
Elise Sherva	
460 CES/CEV	
660 South Aspen Street, Stop 86	
Bldg. 1005, Room 254	
Buckley Air Force Base, Colorado 80011-9551	
(720) 847-9077	
elise.sherva@buckley.af.mil	_

Copies to:	Encl.	Geo-Marine Inc.
		Lin 10 J
		Rae Lynn Schneider
	_ 🗆	

www.geo-marine.com

Transmittal

To:	Colorado Division of Wildlife	From:	Rae Lynn Schneider
		Date:	30 March 2004
	6060 South Broadway Denver, Colorado 80216	Project:	Hazardous Materials Issue Facility and Hazardous Wastes Storage Facility EA
ATTN:	Eliza Moore, Wildlife Manager	Location:	Buckley Air Force Base, Colorado

No.	Description
1	Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Waste Storage Facility at Buckley Air Force Base, Colorado

Comments:	
Please respond with your comments 30 days from the date of this transmittal. See	end comments
to:	
Elise Sherva	
460 CES/CEV	
660 South Aspen Street, Stop 86	
Bldg. 1005, Room 254	
Buckley Air Force Base, Colorado 80011-9551	
(720) 847-9077	
elise.sherva@buckley.af.mil	

Copies to:	Encl.	Geo-Marine, Inc.
		Lue Man
		Rae Lynn Schneider
		U

25 March 2004

Marty Zamck 909 LaFayette, Apt. 605 Denver, Colorado 80218

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. Zamck,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva 460 CES/CEVP 660 South Aspen Street, Stop 86 Bldg. 1005, Room 254 Buckley Air Force Base, Colorado 80011-9551 (303) 677-9077 elise.sherva@buckley.af.mil

Sincerely,

Geo-Marine Inc.

Rae Lyhn Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Linda S. Young 1104 South Biscay Street Aurora, Colorado 80017

RE: Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Young,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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660 South Aspen Street, Stop 86
Bldg. 1005, Room 254
Buckley Air Force Base, Colorado 80011-9551
(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely,

Geo-Marine, Inc.

Rae/Byrm Schneider NEPA Project Manager

cc: Dan Wilkinson, GMI

Elise Sherve, BAFB

25 March 2004

Frank Weddig 15818 East 8th Circle Aurora, Colorado 80011

RE: Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. Weddig,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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660 South Aspen Street, Stop 86
Bldg. 1005, Room 254
Buckley Air Force Base, Colorado 80011-9551
(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely,

Geo-Maring.

1 /

Rae Lynn Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Dominic A. Verizzi 1162 Nucha Street Aurora, Colorado 80011

RE: Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. Verizzi,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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Buckley Air Force Base, Colorado 80011-9551
(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely,

Geo-Marine, Inc.

Rae Lynn Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB



25 March 2004

Richard & Bonnie Rader 71 Algonquian Street Aurora, Colorado 80018

RE: Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. & Mrs. Rader,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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Bldg. 1005, Room 254
Buckley Air Force Base, Colorado 80011-9551
(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely,

Geo-Marine, Inc.

Rae Lynn Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Bob & Leslie Reichardt 23852 East Archer Place Aurora, Colorado 80018

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. & Mrs. Reichardt,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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Sincerely,

Geo-Marine, Inc

Rae Lynn Schneider NERA Project Manager

cc:

Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

David Rathke U.S. Environmental Protection Agency – Region VIII 999 18th Street, Suite 300 Denver, Colorado 80202-2466

RE: Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Rathke,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely,

Rae Lynn Sehneider

Geo-Marine, Inc.

NEPA Project Manager

cc: Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Joel Abernathy 1175 South Cathay Street Aurora, Colorado 80017

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. Abernathy,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva 460 CES/CEVP 660 South Aspen Street, Stop 86 Bldg. 1005, Room 254 Buckley Air Force Base, Colorado 80011-9551 (303) 677-9077 elise.sherva@buckley.af.mil

Sincerely.

Geo-Mariae, Inc

Rae Lynn Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Ivor Alexander 1385 South Uravan Street Aurora, Colorado 80018

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Waste Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. Alexander,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva 460 CES/CEVP 660 South Aspen Street, Stop 86 Bldg. 1005, Room 254 Buckley Air Force Base, Colorado 80011-9551 (303) 677-9077 elise.sherva@buckley.af.mil

Sincerely,

Geo-Marine, Ing

Ra¢ Lynn Schmeider NHPA Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB



25 March 2004

R. Linda Appelbaum 908 South Yampa Street, Unit 106 Aurora, Colorado 80017

RE: Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Appelbaum,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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660 South Aspen Street, Stop 86
Bldg. 1005, Room 254
Buckley Air Force Base, Colorado 80011-9551
(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely,

Geo Marine, Inc

Rae Lynn Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB

25 March 2004

Laura Bishard Colorado Department of Public Health and Environment 6552 West 81st Avenue Arvada, Colorado 80003

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Bishard,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 30 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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Buckley Air Force Base, Colorado 80011-9551
(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely.

Geo-Marine Inc,

Rae Lynn Sehneider NEPA Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB

25 March 2004

Monica Brunecz 23841 East Archer Place Aurora, Colorado 80018

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Brunecz,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva 460 CES/CEVP 660 South Aspen Street, Stop 86 Bldg. 1005, Room 254 Buckley Air Force Base, Colorado 80011-9551 (303) 677-9077 elise.sherva@buckley.af.mil

Sincerely,

Geo-Marine,

Rae Lynn Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB



25 March 2004

Curtis Burns Colorado Department of Public Health and Environment 4300 Cherry Creek Drive South Denver, Colorado 80246

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. Burns,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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Buckley Air Force Base, Colorado 80011-9551
(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely.

Geo-Marine

Rae Lynn Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB

25 March 2004

Margee Cannon City of Aurora Neighborhood Services 1470 South Havana Aurora, Colorado 80012

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Cannon,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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Buckley Air Force Base, Colorado 80011-9551
(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely,

Geo-Marine, Inc.

Rae Lynn Schneider NEFA Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB



25 March 2004

Paul Carlberg 970 South Telluride Street Aurora, Colorado 80017

550 East 15th Street

Draft Environmental Assessment for the Proposed Construction and Operation of RE: a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. Carlberg,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva 460 CES/CEVP 660 South Aspen Street, Stop 86 Bldg. 1005, Room 254 Buckley Air Force Base, Colorado 80011-9551 (303) 677-9077 elise.sherva@buckley.af.mil

Sincerely,

Geo-Marine,

Rae Lypn Schneider Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB



25 March 2004

Russell Clayshulte Community Co-Chair 1529 South Telluride Street Aurora, Colorado 80017

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. Clayshulte,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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Sincerely,

Rae Lypn Schneider

NEPA Project Manager

cc:

Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Elizabeth Cline 1311 South Cathay Court, Apt. 103 Aurora, Colorado 80017

RE: Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Cline,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva 460 CES/CEVP 660 South Aspen Street, Stop 86 Bldg. 1005, Room 254 Buckley Air Force Base, Colorado 80011-9551 (303) 677-9077 elise.sherva@buckley.af.mil

Sincerely,

Rae Inn Schneider NEPA Project Manager

cc: Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Eilene F. Cottingham 13625 East Bates Avenue, #104 Aurora, Colorado 80014

RE: Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Cottingham,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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Bldg. 1005, Room 254
Buckley Air Force Base, Colorado 80011-9551
(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely,

NOS

Rae Lynn Schneider NEP A Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB



25 March 2004

Christopher DeLaRosa 7651 East Harvard Avenue, Apt. 103 Denver, Colorado 80231

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. DeLaRosa,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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Sincerely,

nn Schneider

NEPA Project Manager

cc:

Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Jackie Emmons 477 Salem Street Aurora, Colorado 80011

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Emmons,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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Sincerely,

Geo-Marine

Rae Lynn Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB



25 March 2004

William A Gallant, R.G. Principal, Gallant & Associates 17531 West 59th Avenue Golden, Colorado 80403

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. Gallant,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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Sincerely,

NEPA Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB

25 March 2004

The Honorable Kathy Green Aurora City Council, Ward II 1470 South Havana Street Aurora, Colorado 80012

550 East 15th Street

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Green,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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Sincerely,

Rag Lynn Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI

Elise Sherve, BAFB

25 March 2004

Ron Hinds 1311 South Cathay Court, Apt. 103 Aurora, Colorado 80017

RE: Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. Hinds,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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Buckley Air Force Base, Colorado 80011-9551
(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely,

Geo-Marine

an X

Rae/Lynn Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB

25 March 2004

Jim Ives, CEP Environmental Program Supervisor 1470 South Havana Street Aurora, Colorado 80017

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. Ives.

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue. Denver, Colorado. If you have any questions or comments please direct them to:

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Sincerely,

Rae Lynn Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Marilyn Kay Johnson 14751 East Tennessee Drive, Apt. 227 Aurora, Colorado 80012

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Johnson,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

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(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely,

Geø-Marin

Rae A Schneider

NEPA Project Manager

cc: Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Jennifer Lane U.S. Environmental Protection Agency - Region VIII 999 18th Street, Suite 300 Denver, Colorado 80202-2466

RE: Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Lane,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva 460 CES/CEVP 660 South Aspen Street, Stop 86 Bldg. 1005, Room 254 Buckley Air Force Base, Colorado 80011-9551 (303) 677-9077 elise.sherva@buckley.af.mil

Sincerely,

V Y

Rae/Lynn Schneider NEPA Project Manager

cc: Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Ed LaRock Colorado Department of Public Health and Environment 4300 Cherry Creek Drive South Denver, Colorado 80246

RE: Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. LaRock,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva 460 CES/CEVP 660 South Aspen Street, Stop 86 Bldg. 1005, Room 254 Buckley Air Force Base, Colorado 80011-9551 (303) 677-9077 elise.sherva@buckley.af.mil

Sincerely,

Geo-Marine, Inc

Ræ Lynn Schneider NEPA Project Manager

cc: Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Carolyn J. Lawrence 906 South Walden Street, Apt. 106 Aurora, Colorado 80017

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Lawrence,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva 460 CES/CEVP 660 South Aspen Street, Stop 86 Bldg. 1005, Room 254 Buckley Air Force Base, Colorado 80011-9551 (303) 677-9077 elise.sherva@buckley.af.mil

Sincerely,

Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB



25 March 2004

Melissa Lobe URS Group 8181 East Tufts Avenue Denver, Colorado 80237

RE: Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Lobe,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva
460 CES/CEVP
660 South Aspen Street, Stop 86
Bldg. 1005, Room 254
Buckley Air Force Base, Colorado 80011-9551
(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely,

Geo-Marine

Rae Lynn Schneider

NEPA Project Manager

cc: Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Carol Maclennan Tri-County Health Department 7000 East Celleview Avenue, Suite 301 Greenwood Village, Colorado 80111

RE: Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Ms. Maclennan,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva 460 CES/CEVP 660 South Aspen Street, Stop 86 Bldg. 1005, Room 254 Buckley Air Force Base, Colorado 80011-9551 (303) 677-9077 elise.sherva@buckley.af.mil

Sincerely,

Geo-Marine, In

Rae Lynn Schneider NEPA Project Manager

cc: Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

Ken Melcher 11499 East Dakota Avenue Aurora, Colorado 80012

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. Melcher,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva 460 CES/CEVP 660 South Aspen Street, Stop 86 Bldg. 1005, Room 254 Buckley Air Force Base, Colorado 80011-9551 (303) 677-9077 elise.sherva@buckley.af.mil

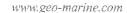
Sincerely,

Rae/Lynn Schneider

NEPA Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB



25 March 2004

Fred B. Mould 980 South Gun Club Road Aurora, Colorado 80018

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. Mould,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva 460 CES/CEVP 660 South Aspen Street, Stop 86 Bldg. 1005, Room 254 Buckley Air Force Base, Colorado 80011-9551 (303) 677-9077 elise.sherva@bucklev.af.mil

Sincerely,

ynn Schneider

NEPA Project Manager

cc:

Dan Wilkinson, GMI

Elise Sherve, BAFB



25 March 2004

William & June Murray 18011 East 14th Drive Aurora, Colorado 80011

RE:

Draft Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility at Buckley Air Force Base, Colorado

Dear Mr. & Mrs. Murray,

This letter is to inform you of the availability of the above-mentioned draft environmental assessment for activities at Buckley Air Force Base. The draft environmental assessment will be available for public viewing from 29 March 2004 to 28 April 2004 at the Aurora Central Library located at 14949 East Alameda Drive, Aurora, Colorado and at the Denver Public Library, Government Documents Section, located at 10 West 14th Avenue, Denver, Colorado. If you have any questions or comments please direct them to:

Elise Sherva
460 CES/CEVP
660 South Aspen Street, Stop 86
Bldg. 1005, Room 254
Buckley Air Force Base, Colorado 80011-9551
(303) 677-9077
elise.sherva@buckley.af.mil

Sincerely

Geo-Marine, In

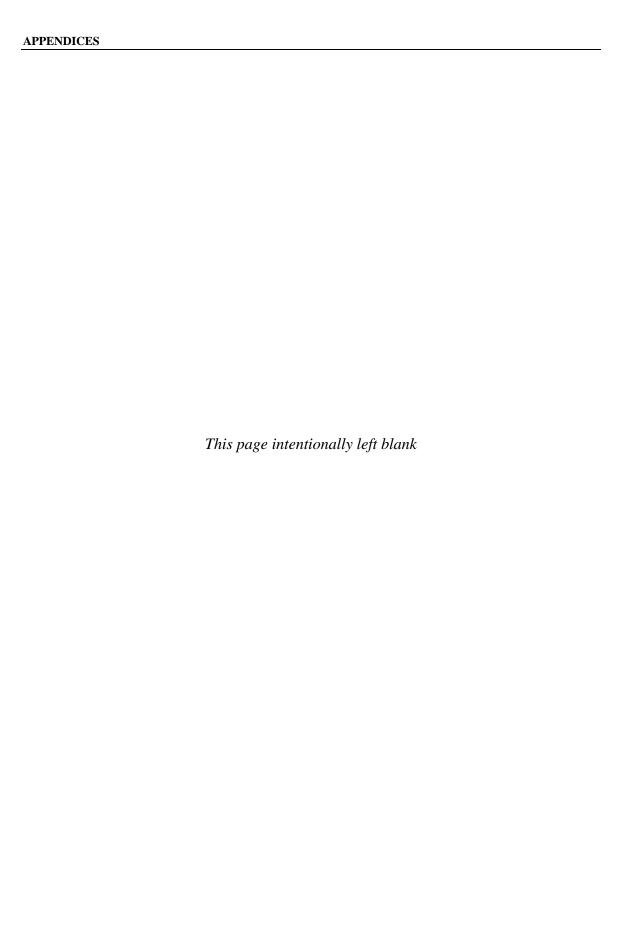
Rae Lynn Schneider NEPA Project Manager

cc:

Dan Wilkinson, GMI Elise Sherve, BAFB

APPENDIX D

COMMENTS AND RESPONSES TO COMMENTS



City of Aurora

Planning Department 15151 E. Alameda Parkway Aurora, Colorado 80012 Phone: 303-739-7250 Fax: 303-739-7268 www.auroragov.org



April 19, 2004

Ms. Elise Sherva Conservation Chief 460 CES/CEVP 660 S. Aspen Street, (Stop 86) Building 1005, Room 254 Buckley AFB, CO 80011-9551

Dear Ms. Sherva:

RE: Comments on Draft EA for Proposed Construction and Operation of a Hazardous Materials Issue Facility and Hazardous Waste Storage Facility, BAFB

The staff for the City of Aurora, Colorado has reviewed the above-referenced document and has the following comments on the Draft Environmental Assessment (EA) for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and Hazardous Waste Storage Facility at Buckley Air Force Base (BAFB):

General Comments:

The proposed project involves the construction of a new 3,767 square foot facility for hazardous materials and a 1,615 square foot hazardous waste storage facility. The purpose of the two facilities is to consolidate and centralize the issuance of hazardous materials that are used and storage of hazardous wastes generated on base. The City staff concurs with the assessment that there will be minimal environmental impacts resulting from the construction and operation of the proposed facility. However, a question has arisen regarding the relationship of the proposed hazardous materials issue and hazardous waste storage facility to the Hazardous Materials Gate. The recent Construction II EA identified the location of a Munitions and Hazardous Materials Gate on the eastern portion of the base, but the proposed facility is located in the southwestern part of the base. Such a location appears to increase the distance traveled by hazardous materials vehicles. This appears to contradict the statements regarding the advantages of the facility location near the Mississippi Gate.

Specific Comments:

Page 3-4, Line 9 – Suggest deleting the phrase "to attainment, for a probationary period." The last clause of the sentence would read better as follows: "due to demonstrating monitored compliance with the NAAQS".

Ms. Elise Sherva, Conservation Chief Page 2 April 19, 2004

Page 3-5 — Suggest deleting Table 3-2 since it is not applicable to the Denver-Aurora metropolitan area.

Page 3-5, lines 2 thru 5 – Suggest rephrasing statement since the current wording is confusing.

Page 3-5, lines 5 & 6 – Suggest deleting entire sentence. It is hard to imagine a scenario where emissions would be de minimis, yet considered regionally significant.

Page 3-22 - Suggest deleting Figure 3-4, since it adds nothing to the document.

Page 3-27, line 5 - Suggest deleting the phrase "by thermal fluids".

Page 4-3 - Suggest deleting Table 4-2 since it repeats information contained in Table 3-3.

Page 4-4, Lines 24 thru 26 – Fugitive dust emissions are not "stationary" emission sources, but rather are classified by EPA as "area" sources.

Page 4-7, line 5 – The furnace to be used for heating the building is likely to be at least 0.25 MMBTU/hour, not 0.25 MMBTU/year.

Pages 4-7 and 4-8 – The entire section on HAP emissions can be summarized in one sentence as follows: "HAP emissions from the combustion of natural gas in the building heating system are insignificant due to the small quantity of gas combusted." The rest of the section can be deleted.

Page 4-7, bottom of page – The proposed MACT standard will apply to boilers and process heaters. It is unlikely that comfort space heaters/furnaces would be subject to MACT requirements.

Thank you for providing the City with an opportunity to respond with comments on the draft EA. We look forward to receiving the Final Environmental Assessment.

Sincerely,

Robert W. Watkins

Acting Director of Planning

RWW/jai

cc: Nancy Freed, Deputy City Manager of Operations Jim Ives, Environmental Program Supervisor

Piccoordination projects/2004/Enviro/BAFB/comments-OraltEA-HazMatthatWaste.doc



DEPARTMENT OF THE AIR FORCE 460TH AIR BASE WING (AFSPC)

AUG 0 2 2004

Lt Col Christopher C. McLane Commander, 460th Civil Engineer Squadron 660 South Aspen Street, Stop 86 Buckley AFB CO 80011-9551

Denise M. Balkas City of Aurora Director of Plans 15151 E. Alameda Parkway Aurora CO 80012

Dear Ms. Balkas

Thank you for your letter dated 19 April 2004, on the Draft Environmental Assessment (EA) for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility, Buckley Air Force Base. Our responses follow:

General Comments. Hazardous materials are currently transported on to the base using the Mississippi Gate, which is near a residential area. The proposed east gate is along State Highway 30, which is a hazardous cargo route. Therefore, it was considered the best overall route even though the on-base transportation routes have increased. The proposed gate is also located so as to provide the best route for munitions transportation. The proposed hazardous materials are generally delivered in the limited quantities.

Page 3-4, line 9. Change incorporated in EA text.

Page 3-5, table 3-2. Since Denver Air Quality Control Region (AQCR) is in the Early Action Compact (EAC), non-attainment is deferred. Therefore, Table 3-2 will be deleted.

Page 3-5, lines 2 thru 5. The sentence was changed to read - "De minimis emissions are total direct and indirect emissions of a criteria pollutant that are caused by a federal action in a nonattainment or attainment/maintenance area that are less than these threshold rates."

Page 3-5, lines 5 and 6. Sentence deleted.

Page 3-22. Figure deleted.

Page 3-27, line 5. The sentence was modified to read - "The spilled fuel was pumped out by a contractor and the case is considered closed."

Page 4-3. Table deleted.

Page 4-4, lines 24 thru 26. "Stationary" was deleted.

Page 4-7, line 5. Typographical error - corrected.

Pages 4-7 and 4-8. No changes made. Hazardous Air Pollutants, to include asbestos, are included in our Environmental Assessments per previous request from the Colorado Department of Public Health and Environment.

Page 4-7, bottom of page. No changes made. We concur with your comment; however, we would continue review of the regulatory changes to ensure that the Maximum Achievable Control Technology (MACT) would not apply. A copy of your comments was forwarded to our Quality Chief and Air Program Manager.

Please contact Ms. Elise Sherva, NEPA Program Manager at 720-847-9077, E-mail elise.sherva@buckley.af.mil if you have any questions or require further information.

Sincerely,

CHRISTOPHER C. McLANE, Lt Col, USAF

Base Civil Engineer

cc:

460 CES/CEVQ/Chief (Ron Lancaster) 460 CES/CEVQ/Air (Roger Albano)

Sherva Elise L Civ 460 CES/CEVP

From: ED J LAROCK [ed.larock@state.co.us]

Sent: Friday, April 02, 2004 4:05 PM

To: anthony.fontanetta@BUCKLEY.AF.MIL; Elise.Sherva@BUCKLEY.AF.MIL

Cc: Janet.Wade@BUCKLEY.AF.MIL; Mark.Spangler@BUCKLEY.AF.MIL;

Rathke, David@epamail.epa.gov; CURTIS L Burns; EDWARD H SMITH; Monica Sheets; Tom

Bain

Subject: Environmental Assessments at BAFB

Lt. Fontanetta,

I am sending comments on three recently received environmental assessments at Buckley AFB. Elise requested comments go to you in her absence.

Preliminary Draft Environmental Assessment for Proposed Construction II, Buckley AFB, Colorado dated March 2004 and received March 8, 2004.

- 1) General The AF ERP program is conducting a basewide preliminary assessment which may identify other environmental concerns not previously identified at the base, potentially in areas proposed for construction.
- 2) Section 2.1.1, Athletic Fields The location of these proposed fields may be in areas where asbestos in soil occurs and/or stockpiles of asbestos contaminated soils exist. All removal activities in these areas should be coordinated with CDPHE as required by existing compliance orders.
- 3) Section 2.1.8, Demolitions, page 2-14 Regulations pertaining to building demolition with asbestos materials are covered by the CDPHE Air Pollution Control Division (APCD). Please contact Mr. Tom Bain of the APCD at 303 692 3182 for further information on these requirements to avoid any regulatory issues.

Draft Environmental Assessment for the Proposed Antenna Construction at the Existing ADF Remote Terminal Facility, Buckley AFB, Colorado dated March 2004 and received March 9, 2004

- 1) General The AF ERP program is conducting a basewide preliminary assessment which may identify other environmental concerns not previously identified at the base, potentially in areas proposed for construction.
- 2) Section 3.6.5, Asbestos Concur with stated intent to coordinate this activity with the State.
- 3) There is no mention of the Environmental Restoration Program. The Proposed Action Location is adjacent to ERP Site 5.
- 4) Figure 1 displays the location of the Rocky Mountain Arsenal National Wildlife Refuge. It is still an NPL superfund site and will not formerly become a wildlife refuge until the superfund remedy is complete. I suggest just calling it the Rocky Mountain Arsenal. Also the figure incorrectly displays the outline of Jefferson County. That is Denver County and it includes DIA. CDPHE made this exact same comment on the Environmental Assessment for the Proposed Construction of an Entomology Facility and Demolition of the Existing Entomology Facility at Buckley AFB, Colorado, in June 2003. Was that Figure ever changed?

Environmental Assessment for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage

Facility dated 28 March 2004 and received March 31, 2004

- 1) General The AF ERP program is conducting a basewide preliminary assessment which may identify other environmental concerns not previously identified at the base, potentially in areas proposed for construction.
- 2) Any asbestos encountered will need to be reported to the CDPHE for proper abatement planning.
- 3) The operation of the facility will be subject to RCRA regulations and inspections.

Please provide a response to these comments and let us know when and where the final documents are available. If you require this in a letter form, please contact me. Thank you for the opportunity to comment.

Ed LaRock
Hazardous Materials and Waste Management Division
Colorado Dept. of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530
303-692-3324
Fax 303-759-5355
ed.larock@state.co.us



DEPARTMENT OF THE AIR FORCE 460TH AIR BASE WING (AFSPC)

AUG 0 2 2004

Lt Col Christopher C. McLane Commander, 460th Civil Engineer Squadron 660 South Aspen Street, Stop 86 Buckley AFB CO 80011-9551

Ed LaRock, Environmental Protection Specialist Colorado Department of Public Health and Environment Hazardous Materials and Waste Management Division 4300 Cherry Creek Drive South Denver CO 80246

Dear Mr. LaRock

Thank you for your comments dated 2 April 2004, on the Draft Environmental Assessment (EA) for the Proposed Construction and Operation of a Hazardous Materials Issue Facility and a Hazardous Wastes Storage Facility, Buckley Air Force Base.

Section 3.8.2.2 of the EA has been modified to clearly identify incomplete or unavailable information per 40 CFR 1502.22. The following text was added to the EA – "Conclusions from an ongoing Environmental Restoration Program [ERP] assessment are not currently known; however, if ongoing ERP assessments reveal concerns within areas proposed for construction, the concerns will be addressed on a case-by-case basis."

Your comment that any asbestos encountered would need to be reported to the Colorado Department of Public Health and Environment (CDPHE) for proper abatement planning goes beyond current law and regulations. We will follow all applicable regulations and approved plans in place at the time of discovery of asbestos as stated in Section 4.10.8. of the EA. Please note that the EA is a procedural decision-making document, versus a compliance document, where the Federal Agency takes environmental concerns into consideration when making a decision regarding the proposed action (e.g., construct a building). The EA is also used as a screening document to determine whether an Environmental Impact Statement (EIS) would be required for the proposed action. In addition, we forwarded your comments to the Restoration Chief, Quality Chief, and Toxics Program Manager who are aware of the existing regulations.

We concur with your comment that the operations of the facility would be subject to RCRA regulations and inspections, which would be considered "following all applicable regulations" as stated in Section 4.10.8. of the EA.

If you have any further questions please contact Ms. Elise Sherva, NEPA Program Manager at 720-847-9077, email elise.sherva@buckley.af.mil, or Ms. Janet Wade, Environmental Flight Chief at 720-847-9977, email janet.wade@buckley.af.mil.

Sincerely,

CHRISTOPHER C. McLANE, Lt Col, USAF

Base Civil Engineer

CC:

460 CES/CEVQ/Chief (Ron Lancaster)

460 CES/CEVR/Restoration Chief (Mark Spangler)

460 CES/CEVQ/Toxics Program Manager (Chad Callan)



DEPARTMENT OF THE AIR FORCE 460TH AIR BASE WING (AFSPC)

Lt Col Christopher C. McLane 460th Civil Engineer Squadron 660 S. Aspen Street, Stop 86 Buckley AFB CO 80011-9551 APR 1 4 2004

Georgianna Contiguglia State Historic Preservation Officer Colorado History Museum 1300 Broadway Denver CO 80203-2137

Dear Ms. Contiguglia

The Air Force has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for construction and operation of a hazardous materials issue facility and a hazardous wastes storage facility. The construction of these two buildings is required to consolidate and centralize the majority of hazardous materials used and hazardous wastes generated to facilitate utilization, tracking and disposal. The Draft EA and Draft FONSI are attached for your information, review and comment. The attached figure shows the approximate proposed location for this facility.

In compliance with Section 106 of the National Historic Preservation Act, Buckley Air Force Base has determined that the proposed action, and alternatives, would not have an adverse affect on historic properties. There are no known archaeological or historic structure resources in, or near, the proposed sites. Building information, with the dates of construction in parenthesis, is outlined below.

- Buildings 1011 (5AH1528) and 1012 (5AH2317): Were determined to be ineligible for inclusion on the National Register of Historic Places per formal consultation with your office.
- Buildings 1000 (1990), 1001 (1998), 1002 (2000), 1003 (1999), 1004 (1990), 1005 (1994), 1006 (1998), 1007 (1994), 1008 (1994), 1009 (1996), 1014 (2002 originally planned as an addition to building 1007), Mod 5 (2002) 1504 (1994) and 1505 (mobile temporary building) were constructed or in place after 1990. Therefore, they are not eligible for inclusion on the National Register of Historic Places.
- Buildings 1500 (5AH2324), 1501 (5AH2325), 1502 (5AH2326) and 1503 (5AH2327) (1977) were not recommended as eligible for listing on the National Register of Historic Places as they are general purpose facilities and have no known association with significant events or persons per the Draft Historic Building Inventory and Evaluation dated Dec 2003.

The public comment period for this EA is 30 days. Please provide any written comments to:

1Lt Fontanetta/Floyd Hatch 460 CES/CEVP 660 S Aspen Street, Stop 86 Buckley AFB CO 80011-9551

If you have any questions please feel free to contact 1Lt Anthony Fontanetta, Acting Environmental Planning Chief, at 720-847-9187 or via email at anthony.fontanetta@buckley.af.mil.

CHRISTOPHER C. McLANE, Lt Col, USAF

Base Civil Engineer

2 Attachments Draft EA Draft FONSI



The Colorado History Museum 1300 Broadway Denver, Colorado 80203-2137

April 20, 2004

1Lt. Fontanetta/Floyd Hatch 460 CES/CEV 660 South Aspen Street, Stop 86 Buckley AFB, CO 80011-9551

Re: Section 106 review, Draft Environmental Assessment (EA) and No Significant Impact (FONSI) reports for construction and operation of a hazardous materials issue facility and a hazardous wastes storage facility (CHS #42914).

Dear 1Lt. Fontanetta and Mr. Hatch,

Thank you for your correspondence dated April 14, 2004 and received by our office on April 16, 2004 regarding the above-mentioned project.

Our office has reviewed the submitted information and we concur with your finding of *no adverse effect* under Section 106 of the National Historic Preservation Act (36 CFR 800).

If we may be of further assistance, please contact Amy Pallante, our Section 106 Compliance Coordinator, at (303) 866-4678.

Sincerely,

FOT Georgianna Contiguglia

State Historic Preservation Officer